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The Need of Historical Materials for Agricultural Research
Everett E. Edwards

The Rise and Decline of the Sheep Industry in Northern New England
Harold F. Wilson

Agricultural Policy in New France
H. M. Thomas

Published Quarterly
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THE AGRICULTURAL HISTORY SOCIETY

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AGRICULTURAL HISTORY is designed as a medium for the publication of research and documents pertaining to the history of agriculture in all its phases and as a clearing house for information of interest and value to workers in the field. Materials on the history of agriculture in all countries are included, and also materials on institutions, organizations, and sciences which have been factors in agricultural development.

Correspondence concerning contributions and books for review may be sent to Everett E. Edwards, Room 3901, South Building, 13th Street and Independence Avenue, S.W., Washington, D. C.; correspondence concerning membership dues and business matters, to O. C. Stine, at the same address.

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THE NEED OF HISTORICAL MATERIALS FOR AGRICULTURAL RESEARCH[1]

The United States has been until recently a nation of farmers, but comprehending students of America's past now realize that far too little cognizance has been given to this fact in the writing and teaching of our history. At the beginning of the American Revolution, 97 percent of the inhabitants of the thirteen colonies were farmers, and even the remaining percentage, representing tradesmen, craftsmen, and fishermen, were directly interested in farming. At the time of the Civil War, 84 percent of the American people lived on farms or in towns that had a population of less than 8,000. Only since the World War has the urban element of our population outnumbered the rural. Even today we seldom meet an American who is entirely without rural background or experience. For over two and one-half centuries our country was primarily rural, and the elements of our national life which we consider distinctly American originated in that background. It is well to remember that the American way of doing things is a heritage from our rural past.

Realization of this fact—that the warp and woof of our Nation's history is the story of a people whose economic, social, and political life centered in agriculture—has turned and is turning the attention of many historians and economists to the study of our country's development from this elemental point of view.[2] To succeed in their investigations students of our past and present problems must have access to historical records, and especially

[1] This article is an expansion of statements in the writer's papers on the same subject in the U. S. Department of Agriculture *Yearbook* for 1932, p. 197–200, and in *Agricultural Library Notes*, 8:185–188 (December 1933).

[2] For citations on this subject, see the writer's *References on Agricultural History as a Field of Research and Study* (U. S. Bureau of Agricultural Economics, November 1934. 8 p., mimeographed).

those which afford information on the activities of farmers.[3] They must have account books of country stores and similar business organizations, mill records, old farm periodicals and rural newspapers, and proceedings of agricultural and horticultural societies.[4] Of equal significance are farmers' account books, diaries, letters, and reminiscences. Single or scattered copies of this kind of material may not seem of consequence, but if added to collections of similar material they may be of great value. Pictures of all phases of rural life also have their place in reconstructing the past, and they should be collected and preserved.[5]

Dr. Alexander C. Flick has aptly said:

> Buried in old chests and trunks, concealed in cluttered attics, and hidden in bureau drawers, congested closets and a hundred other places are treasures more

[3] Most of the analyses available in the form of articles, books, and bulletins are listed by the writer in his "Bibliography of the History of Agriculture in the United States," issued as U. S. Department of Agriculture *Miscellaneous Publication 84* (Washington, 1930). The bibliographical notes in the News Notes and Comments section of each number of *Agricultural History* are designed to supplement this bibliography.

[4] For a statement of the importance of thoughtful and systematic preservation of historical data, see Edwin F. Gay, "Historical Records," in the *American Economic Review*, 20:1–8 (March 1930), and in the *Scientific Monthly*, 30:289–294 (April 1930). For similar statements, based on varied experience in directing the work of historical societies, see Solon J. Buck, "The Problem of Adequate Historical Collections," in *The Trans-Mississippi West*, edited by James F. Willard and Colin B. Goodykoontz, p. 249–256 (Boulder, Colo., 1930); Joseph Schafer, "Assembling Historical Manuscripts," in the *Wisconsin Magazine of History*, 17:232–242 (December 1933); and Charles W. Smith, "Coordination in the Collection of Source Material: A New Deal in Documents," in the *Washington Historical Quarterly*, 25:103–107 (April 1934). W. A. Lloyd's suggestions on "The Relation of the County Farm Bureau and the County Agent to the Collection of Historical Data Relating to Agriculture" appear in the Mississippi Valley Historical Association *Proceedings* (1917–18) 9:441–449. See also Carlton C. Qualey, "A Hunt for Norwegian-American Records," in *Norwegian-American Studies and Records*, 7:95–120 (Northfield, Minn., 1933). In this work he used a leaflet entitled *Wanted! The Records of the Norwegians in America* which is a valuable example of a circular designed to discover historical materials and encourage their transfer to places of deposit.

[5] J. G. Williams, "Recording Local History in Pictures," in the Ontario Historical Society *Papers and Records*, 29:117–120 (1933); Robert Taft, "A Photographic History of Early Kansas," in the *Kansas Historical Quarterly*, 3:3–14 (February 1934).

valuable than pirate doubloons. These buried treasures are revelations of the mysteries of human life to those who can interpret them. They explain love and hate, hope and fear, ambition and despair, good intention and bad—in short, the emotions of the heart, the motives and operations of the mind, and the creations of man's hands. They reveal what man has done, felt, thought and been. They give an intimate picture of the individual, the family, the community, the state, the nation and the world because they constitute the original material from which history is created.[6]

These commonplace documents of the past are the necessary sources of information used by historians and economists in making analyses of our past agricultural and economic life. The materials mentioned supply research workers with many essential facts not obtainable elsewhere. They furnish data indicating the course of rural standards of living; they show the influence of the competition of the various agricultural sections, the shifts and variations in crop acreages and livestock production, and the changes in systems of farm management. They record prices that farmers pay for hired labor, fertilizers, machinery, twine, and other supplies, and prices received by farmers for their agricultural products.[7] They afford information on yields, disease epidemics, and the dates of the introduction of new varieties and breeds and new cultural practices. The country-store records throw light on the spread between rural and city prices and the changing margin between cost and selling prices. Pamphlets and reports of agricultural societies are indispensable if we are to have accurate accounts of the part they took in efforts to ameliorate agricultural conditions by political action, the contributions they made to the social betterment of rural life, and their attempts at coöperative buying and selling.

The writings of research workers in which they summarize and interpret their findings in the historical materials of the kinds here emphasized show us how the present agricultural and economic

[6] "Our Buried Treasures," in *New York History*, 14:42 (January 1933).

[7] For notable examples of what can be done with price data, see Arthur G. Peterson, "Historical Study of Prices Received by Producers of Farm Products in Virginia, 1801–1927," Virginia Agricultural Experiment Station *Technical Bulletin 37* (Blacksburg, Va., 1929); and Roger F. Hale, "Prices Paid for Maryland Farm Products, 1851–1927," Maryland Agricultural Experiment Station *Bulletin 321* (College Park, Md., 1930).

conditions came about. They also afford perspective, that is, a realization of what are the more permanent and what the more accidental and transient elements of present-day conditions. Through reading them, our sympathies are broadened, our judgments steadied, and our experiences enlarged.

Various organizations have taken, and are taking, steps to collect and preserve the materials from which the history of all phases of American agriculture may be written. Practically all of the State historical societies are now actively interested in agricultural records, albeit it may be conceded that some of them have clung too long to the antiquated view that history relates largely to political and military matters. The work of historical societies and research libraries is conveniently described in the *Survey of Activities of American Agencies in Relation to Materials for Research in the Social Sciences and the Humanities* (Washington and New York, 1932), compiled by Franklin F. Holbrook for the Joint Committee on Materials for Research of the American Council of Learned Societies and the Social Science Research Council. To single out the institutions that are most active in gathering the materials essential for histories of all phases of the past, including our country's agricultural development, is to invite the charge of ignorance of many worth-while efforts. The collections here referred to are merely cited as illustrations.

The Library of the United States Department of Agriculture is developing an agricultural history collection as the national center of research in this field. The Division of Statistical and Historical Research of the Bureau of Agricultural Economics and the Agricultural History Society are coöperating in this undertaking. In building up this collection the Library has long given special attention to the acquisition of early farm periodicals, the publications of agricultural and horticultural societies, and early books and pamphlets on agriculture published in the United States.

Especially noteworthy is the Library's collection of catalogs and other trade publications of firms and individuals engaged in the nursery and seed business. It includes over fifty-four thousand items and is probably the largest of its kind in the

United States. Some of the catalogs were issued in the eighteenth century. Far from being ephemeral as many may assume, these publications are essential to research workers who are concerned with the history, nomenclature, description, and location of the distribution of fruits, vegetables, and ornamentals.[8] The provenance of a plant as recorded in a seed catalog is often a fact of great value, to be readily found nowhere else, and of cardinal importance in tracing hybrid origins. "Buckle, in his *History of Civilization in England*, and Macaulay in his *History* and *Essays* found much of their most valuable data in the flotsam and jetsam of literature; and no branch of commercial activity is more dependent for its history on what may be regarded as *ephemerides* than that which deals with the history of the dealer in seeds and plants. Carlyle . . . declared that 'ten histories of kings and courtiers were well exchanged against the tenth part of one good History of Booksellers'; and the same . . . might be said of the seedsman and nurseryman."[9] Since the 1880's the libraries of the Massachusetts Horticultural Society and Cornell University have also made systematic collections of trade catalogs.[10]

The Business Historical Society with headquarters in the George F. Baker Library, Soldiers Field, Boston, is actively collecting and promoting the preservation of business records. Its special interest is account books, journals, diaries, letter books, correspondence, indentures, and the countless other records of achievement left by the business men and organizations who laid the foundations of our commercial and industrial system.

[8] Claribel R. Barnett, "Horticultural Trade Catalogues," in *Agricultural Library Notes*, 1:76–77 (May 1926). See also "Preservation of Trade Catalogues," in the *Gardeners' Chronicle*, 80:41 (July 17, 1926); E. A. Bunyard, "Nurserymen's Catalogues and Their Value," in the Royal Horticultural Society *Journal*, 51:82 (January 1926); and M. A. Blake, "Old New Jersey Catalogue Proves a Rare Find," in *New Jersey Agriculture*, 5(12):6 (December 1923).

[9] W. Roberts, "A Seedsman's Broadside," in the *Gardeners' Chronicle*, 71:54 (Feb. 4, 1922).

[10] Dorothy St. J. Manks, "Trade Catalogues in the Library of the Massachusetts Horticultural Society," in *Agricultural Library Notes*, 3:295–296 (October–December 1928); Alfred M. S. Pridham, "Collection of Horticultural Catalogues in Cornell University Library," in *ibid.*, 4:328 (January–February 1929).

As a pioneer in the field of business research, the Society is the main clearing house for historical business information. Account books of farms and of country stores where farm produce was used in barter in early days are also of particular interest. Much material of this description is now in its possession and is used to advantage by students. Additional data will serve to supplement the information already secured.[11]

The Western Pennsylvania Historical Survey, financed by the Buhl Foundation, in coöperation with the Historical Society of Western Pennsylvania and the University of Pittsburgh, and under the direction of Professor Solon J. Buck, has undertaken the systematic search for and preservation of the materials relating to the history of western Pennsylvania.[12]

During the past five or six years the Library of the University of Virginia, under the direction of Dr. Lester J. Cappon, has given special attention to gathering historical material on Virginia. The types of material especially sought include old letters, diaries, records, and manuscripts of original composition; old documents, such as wills and deeds; old Virginia newspapers; and old books and magazines about Virginia, by Virginians, or published in Virginia.[13] The Library of the College of William and Mary has also assembled materials pertaining to Virginia.

At the University of North Carolina Professor J. G. de Roulhac Hamilton is directing the development of a National Southern Collection in which special attention is being given to manuscript material relating to all phases of the history of the old slave States of the South.[14] The material on North Carolina runs to well over

[11] See the pamphlet, *The Business Historical Society, Inc.*, 4–9 (Boston, 1935); "Industries Are Traced by Old Attic Records," Springfield (Mass.) *Republican*, Feb. 10, 1935; M. R. Cusick, compiler, *List of Business Manuscripts in Baker Library* (Boston, 1932).

[12] Solon J. Buck, "A Program for Research in Western Pennsylvania History," in the *Western Pennsylvania Historical Magazine*, 15:47–62 (February 1932); Alfred P. James, "Opportunities for Research in Early Western Pennsylvania History," in *ibid.*, 16:125–137 (May 1933).

[13] "The Virginia Collection at the University of Virginia," in *Agricultural History*, 4:75 (April 1930). See also Kathleen Bruce, "Materials for Virginia Agricultural History," in *ibid.*, 4:10–14 (January 1930).

[14] J. G. de Roulhac Hamilton, "Agricultural History Materials and Their

forty thousand pamphlets and volumes and a large amount of material bearing on other Southern States has been assembled. The data have been provided with a fireproof structure as a repository at Chapel Hill through an appropriation by the State.

The University of South Carolina has given attention to the records of old plantations. Professor W. H. Mills of Clemson Agricultural College has assembled many old books and pamphlets on the agriculture of South Carolina, and Professor E. Merton Coulter of the University of Georgia has a valuable collection of about five thousand documents relating to the many activities that took place on a plantation. The agricultural colleges of Cornell University and the University of Wisconsin have utilized many old farm, mill, and creamery records in long-time price studies. The State Historical Society of Wisconsin and the Minnesota Historical Society have been outstanding in gathering historical records, and their collections include a considerable number of farmers' diaries and similar materials.

The McCormick Historical Association is maintaining and developing at the McCormick Agricultural Library, 679 Rush Street, Chicago, an extensive collection of printed, manuscript, and museum materials on a wide range of subjects centering about the activities and interests of Cyrus H. McCormick, the inventor of the reaper, and the McCormick family. In this work the Association utilizes the foresight and diligence of Mr. Herbert A. Kellar, one of the pioneers in agricultural history research. The Library's printed material comprises about fifteen thousand items and is exceptionally complete for the history of the development of agricultural machinery. Included in its million and a half manuscripts are the extensive McCormick family personal papers, the earlier ones pertaining to life in Virginia and the later ones to the Mississippi Valley and elsewhere. Voluminous files of the records of the McCormick reaper companies constitute another important group. They include letters received and sent, ledgers of orders, sales, deliveries, cash books, day books,

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Collection," in *Agricultural History*, 4:14–18 (January 1930), and "A National Southern Collection at the University of North Carolina," in the Baltimore *Sun*, Mar. 4, 1928.

and patent records,—in short, the sources for the continuous and detailed history of the development of a vast international economic organization which also afford valuable data for the study of the development of manufacturing, advertising, marketing, accounting, cereal production, the relations of capital and labor, and the settlement and development of the Middle West. The Library also possesses a considerable collection of Virginiana for the years 1737 to 1880. It consists of letters, ledgers, accounts, and plantation records which afford information on practically all phases of life in Virginia. Illustrations, relating particularly to agricultural machinery, have also been given special attention. The same is true of originals, replicas, and models of agricultural machinery.

In the Southwest, Mr. T. C. Richardson, field editor of *Farm and Ranch*, is head of a committee of the Texas Agricultural Workers Association which is gathering and indexing material bearing on the agricultural, social, and economic development of Texas. Mr. Richardson has spent several years gathering data for an agricultural history of Texas, and he has offered to use his documents as a nucleus for this collection. Already the literary remains of two horticulturists of international reputation, T. V. Munson and Gilbert Onderdonk, have been secured.[15]

More recently Professor Walter Prescott Webb of the University of Texas has launched plans for a Great Plains History Collection. Although it is planned to include materials on the many phases of western life, including transportation, mining, dry farming, and irrigation, the first acquisitions pertain largely to ranching in the Southwest. Already manuscript materials, diaries, account books, business papers, and letters, totaling more than 130,000 documents have been secured.[16]

Having indicated the utility of account books and records of country stores, mills, and individual farmers, old agricultural periodicals and rural newspapers, proceedings of agricultural and horticultural societies, diaries, and similar materials as sources of

[15] "Agricultural History in Texas," in *Agricultural History*, 5:129 (July 1931).

[16] *Southwestern Historical Quarterly*, 37:73 (July 1933); *American Historical Review*, 38:847 (July 1933); *Agricultural History*, 7:154 (July 1933).

information on our agricultural life and having shown by way of illustration the efforts which various organizations are making to preserve them, it is hardly necessary to plead that they be given to historical collections. Preserving them is showing gratitude,—an appreciation of the generations whose labors are therein recorded,—but they should be placed in the hands of historical organizations where they can be readily used by research workers to significant advantage. The materials may possess a certain value to their owners, but their perpetuity should not be menaced by failure to take steps to safeguard them from destruction by fire or similar disasters. It is hoped that readers of this article who have or know of historical materials of the kind here discussed will aid historical and economic research by giving them to, or depositing them with, historical collections where they will be classified, filed in fireproof cases, and made forever accessible to research workers.

EVERETT E. EDWARDS

Bureau of Agricultural Economics
U. S. Department of Agriculture

THE RISE AND DECLINE OF THE SHEEP INDUSTRY IN NORTHERN NEW ENGLAND[1]

The soil is such, and the seasons are so uncertain, for the perfection of crops of grain, that grazing is the most sure and profitable branch of agriculture which the farmer . . . can attend to with success.[2]

Although the dairy industry is today the chief source of income for the New England hill-country family, many a farmer looks back fondly to the days of the last century when the raising of sheep was the main business in the majority of the hill towns. The average northern New England farmer shifted from sheep raising to dairying only because he was forced to do so. The care of cows was a much less attractive task than the herding of sheep. Moreover, the dairyman was far more confined than the sheep raiser. The cows must be milked twice a day and the milk taken care of at once. The dairy farmer had to begin work as early on Sundays as on other days, and if he went away from the farm in the afternoon, he had to be back in time to "get the cows in" and milk them. The man who raised sheep had no such chores. Indeed, during the summer season the latter animals required little more attention than to be salted once or twice a week.[3] Under these circumstances, sheep husbandry was given up with regret. "No more," lamented a Vermont farmer in 1877, "will we see again our rival wool buyers, as they go hurry-skurry past and over each other in their eager scramble to be first at

[1] This article summarizes parts of the extensive research presented in the author's doctoral dissertation, "A Study in the Social History of Rural Northern New England, 1830–1930" (Harvard University, 1933), and in a forthcoming volume on *The New England Hill Country, 1790–1930* in the Columbia University Studies in the History of Agriculture series, edited by Professors Harry J. Carman and Rexford G. Tugwell.—*Editor.*

[2] Opinion of Nathan Hoskins in his *History of the State of Vermont*, 268 (Vergennes, Vt., 1831).

[3] For contemporary opinions of farmers on the relative merits of sheep husbandry and dairying, see the New Hampshire Board of Agriculture, *Annual Report* (1878) 8:586–589.

your wool-rooms. . . . Is it no vexation to find . . . that it is the Dairy or nothing?"[4]

The hill country of northern New England was peculiarly adapted to the raising of sheep; its rock-strewn fields and pastures could produce wool better than corn and wheat. There is a common saying that the Granite State raised sheep because only sheep had noses small enough to reach down between the rocks for the wisps of grass,[5] while the ancient joke in Vermont that sheep's noses were sharpened by nature so that they could reach in between the rocks to graze is still not without significance both as to the character of the country and the adaptation of sheep to it.[6]

"THE SHEEP MANIA"

In the first half of the nineteenth century rural life in the New England hills underwent a transition from self-sufficient to commercial agriculture, due largely to the stimulus afforded by the rise of manufacturing in the inland towns and villages. The period 1815–1840 saw the establishment of many small factories in southern New England and within a short time their products were being sold to the farmers as well as to the city folk, being aided by the spread of the railroad net. In order to procure the cash with which to pay for these purchases, the hill-country husbandman turned to the production of greater quantities of a few commodities in order to have a surplus which he could sell. He raised more sheep or sent out more butter and cheese when his wife and daughters no longer spun yarn and wove cloth for the family garments. The development of factories for the making of woolen cloth offered him a nearby and profitable market and the growth of sheep raising ensued. By 1830, the northern New England farmers were realizing large returns from the wool they raised. In that year, for instance, the total clip of Vermont alone sold for about $1,200,000.[7] The demand for wool increased stead-

[4] G. H. Rice, "Discouragements of Farming," in the Vermont Board of Agriculture, *Report* (1877) 4:87.

[5] L. A. Bevan and J. P. Heaton, "Why Go West, Young Man?," in *Current Affairs* (Boston Chamber of Commerce), 12 (37):7 (Jan. 30, 1922).

[6] J. R. Smith, *North America*, 154 (New York, 1925).

[7] E. A. Carman, H. A. Heath, and John Minto, *Special Report on the History and Present Condition of the Sheep Industry in the United States*, prepared under

ily with a consequent rise in the price it commanded. According to *A Statistical View*, a booklet on the industry published in 1837, the price of wool mounted, with some fluctuations, from thirty-six cents a pound in 1827 to fifty-seven cents in 1835.[8]

So close was the market in the urban parts of southern New England that the animals could be driven there without serious harm,[9] and some maintained that both cattle and sheep tended to gain weight on the long journey by cropping vegetation along the roadsides. They were frequently driven southward in large herds. The toll-keeper at the bridge over the Connecticut River between Windsor, Vermont, and Cornish, New Hampshire, noted the passage on Sunday, November 12, 1837, of "Gen'l Lyman Mower," with his following, which included "1 wagon, 1 sulky, 1 horse & rider, 600 sheep, 127 cattle."[10] Their destination was generally Brighton, the location of one of Boston's abattoirs, where they were sold to local dealers for nearby consumption. Butchers from the growing factory towns were also prospective customers. In fact, in times of quick sales, a drover of cattle and sheep would often be accosted by a purchaser when he was still a day's journey from market and would sell his livestock without continuing farther. By the latter thirties, the trade had increased until as many as five to eight thousand sheep daily

the direction of D. E. Salmon, 172 (Washington, 1892). Hereafter, this work is cited as Carman, *Special Report*.

[8] C. Benton and S. F. Barry, compilers, *A Statistical View of the Number of Sheep in the Several Towns and Counties in Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, and Ohio . . . in 1836*, 122 (Cambridge, Mass., 1837). To gather their statistics, one of the compilers visited even the "remote sections" of northern New England, and "upwards of two thousand circulars" were sent to officials in various towns to procure "a correct knowledge of the facts solicited." One of the compilers, a dealer who had bought a million and a half pounds of wool during the previous decade in the three northern New England States for use in Massachusetts factories, declared that in the light of his experience sheep raising was "a surely profitable business." Hereafter this booklet is cited as Benton and Barry, *Statistical View*.

[9] H. F. Wilson, "The Roads of Windsor," in the *Geographical Review*, 21:382 (July 1931).

[10] "The Toll Bridge Journal of 1837," entry for November 12 (MS. in the possession of H. S. Wardner of Windsor and New York).

entered the Brighton market from Maine, New Hampshire, and Vermont, and in lesser numbers from the interior of Massachusetts.[11]

With such a favorable market, increasing numbers of farmers turned to sheep raising. In 1833 the *Maine Farmer* urged the husbandmen of that State to raise more sheep, particularly "upon lands that must otherwise be nearly if not wholly useless." The journal admitted that cattle would "do tolerably well" on such land, but "not as well as sheep," and added convincingly, "If the first afford us food, the latter give us both food and shelter."[12] In the late thirties, the *Cheshire Farmer* remarked upon the rapid growth of the sheep industry in New Hampshire,[13] and in many Vermont localities the production of other staples was by that time becoming only a secondary consideration. Harriet Martineau observed in 1837 that while Vermont used to furnish Boston with fowls, butter, and eggs, the supply had nearly ceased, partly owing to the increased attention to the growth of wool for manufacturing.[14]

The effect of the growing interest in wool production was felt most keenly, however, in cattle raising. Between 1832 and 1837 the number of cows in Vermont decreased by thirteen thousand, the "two-year old cattle" by fifteen thousand, and the number of yokes of oxen by thirteen thousand, but the increase in the number of sheep in the State more than compensated for this decline.[15]

The heyday of sheep raising on the farms of the New England hill country came in the late thirties and early forties. During these years many of the farmers of the region became obsessed with what was termed "the sheep mania." Forced by the lessening self-sufficiency of the hill farms to find some source of

[11] H. B. Hall, "Rural Life and Labor in Massachusetts," 84 (MS. Cambridge, 1917). Boston's other abattoirs were at West Cambridge and Somerville. By the early forties the Brighton market was referred to as "the great cattle fair of New England." *Ibid.*, 143.

[12] *Maine Farmer* (Winthrop, Me.), 1:267 (Sept. 7, 1833).

[13] *Cheshire Farmer* (Keene, N. H.), 2:99 (June 1839).

[14] Harriet Martineau, *Society in America*, 1:294 (New York, 1837).

[15] *Cheshire Farmer*, 2:99 (June 1839), quoting from a special report of the Vermont State Legislature.

cash income, the husbandmen in many localities came to depend upon sheep to the practical exclusion of other agricultural activities.[16]

An examination of *A Statistical View* reveals the importance of the industry in the latter thirties. This account gives the distribution of sheep in the townships of Vermont and New Hampshire in 1836. The former State was literally dotted with them. Except for a few remote districts in the Green Mountains and in the frontier section of northern Vermont, every town had more than 1,000, while some of them possessed over 5,000, and a few in the Connecticut Valley and the Champlain Valley had been transformed into vast sheep runs where the number totaled more than 10,000 per town. To a lesser degree, a similar situation prevailed in New Hampshire. The industry was most important in the Connecticut Valley region, and three towns, Walpole, Lebanon, and Hanover, counted over 10,000 sheep apiece, while twenty possessed from 5,000 to 10,000 each, and one hundred and two towns reported from 1,000 to 5,000 each.

During the boom years, the desire to increase their pasturage area frequently led the prosperous farmers to buy up neighboring farms and turn them into sheep runs. Sheep thus sometimes tended to crowd out human population. Instances of this occurred in the earlier-settled portions of northern New England even before the thirties. Thus, one Vermonter recalled that as a boy he had moved with his father in the fall of 1826 from Westminster in southeastern Vermont to the northern frontier of the State after the home farm had been sold to a well-to-do sheep raiser. "Men counted their flocks by thousands," this man recollected, "and as they grew more and more rich in money and sheep, bought farm after farm adjoining their own and turned them into pasturage."[17] Countless cases occurred in which the

[16] The history of one town in north-central New Hampshire states that from 1830 to 1860 the raising of sheep was one of the chief sources of income for the farmers of the locality. In 1844, 1,265 sheep were taxed in this town; in 1902, only 119. R. W. Musgrove, *History of the Town of Bristol, Grafton County, New Hampshire*, 1:443 (Bristol, 1904).

[17] M. B. Thresher, "A New England Emigration," in the *New England Magazine*, 16:373 (May 1897).

avid desire to increase the acreage for sheep pasturage tended to push from farms families that might have any inclination to move West. "Beware of the 'western fever' and above all, sell not your farms to your rich neighbors for sheep pastures," warned the scribe, "Green Mountaineer," in 1834.[18]

Although the Panic of 1837 brought a reduction in the price of wool, there was still a sufficient margin of profit in the business to cause a continued increase in the number of sheep, and between 1836 and 1840 the flocks of northern New England farmers grew rapidly, the industry reaching its climax in the early forties.[19] In Maine, the number mounted from 622,000 in 1836 to 649,000 in 1840, while in New Hampshire it rose from 465,000 to 617,000 in the same period, and in Vermont the 1836 figure of 1,099,000 reached 1,681,000 in 1840.[20] By the latter year, Maine, as well as Pennsylvania, Virginia, Kentucky, and Connecticut, could count one sheep to each inhabitant, and Ohio had a fraction more than one. New Hampshire, as well as New York, had $2\frac{1}{4}$, while Vermont reported $5\frac{3}{4}$ to each person. At that time, New Hampshire possessed 65 sheep to the square mile; New York, 112; Vermont, 165; while Addison County in the latter State, with 373 sheep to the square mile, raised in proportion either to territory or population, a greater number of sheep and produced more wool than any other county in the United States.[21]

In these years the mills of southern New England continued able and willing to take all the wool that the hill-country shepherd-farmers could produce,[22] and the region itself contained

[18] *Vermont Chronicle* (Windsor, Vt.), Oct. 17, 1834. See also Samuel Swift, *History of the Town of Middlebury in the County of Addison, Vermont*, 95 (Middlebury, Vt., 1859); Joseph Joslin, Barnes Frisbie, and Frederick Ruggles, *A History of the Town of Poultney, Vermont*, 81 (Poultney, Vt., 1875).

[19] L. G. Connor, "A Brief History of the Sheep Industry in the United States," in the American Historical Association, *Annual Report*, 1918, p. 111–112 (Washington, 1921). This monograph also appears in the *Agricultural History Society Papers*, 1:89–197 (Washington, 1921). Hereafter, this work is cited as Connor, *History of the Sheep Industry*.

[20] Benton and Barry, *Statistical View*, 9, 21, 33.

[21] Swift, *History of Middlebury*, 96–99, quoting from a speech of Silas H. Jenison, governor of Vermont, before the Addison County Agricultural Society, Middlebury, Oct. 1, 1844.

[22] Connor, *History of the Sheep Industry*, 110–111.

many small local woolen mills. In 1836, there were twelve in Maine, thirty-one in New Hampshire, and thirty-three in Vermont, producing cassimeres, satinets, blankets, and broadcloth.[23] The sheep industry seemed a permanent part of the agricultural economy of northern New England. "The raising and keeping of sheep," observed the Governor of New Hampshire in 1837, "is good business for the farmer,"[24] and the *Cheshire Farmer* amplified this statement when it pointed out in 1840 that "A flock of good ewes with proper management will hardly fail of doubling their numbers within the year and if to the sale of wool, the value of the lambs be added, it will be seen after deducting the expense of keeping, that a handsome profit remains."[25]

By the early forties, large areas in the hill country had become vast sheep-pastures, and the well-being of many a locality hinged upon the price of wool. So firmly had the industry become intrenched in Vermont, for instance, that the Governor of that State noted in his message in 1842, "Our citizens have become so dependent upon the growing of wool that this article may be said to be the staple of the state."[26]

THE DECLINE OF SHEEP RAISING

"Careful management will always make sure the success of the fine wool growers upon the granite hills of New Hampshire," prophesied the *Farmer's Monthly Visitor* in 1845, in a tone of satisfaction as it contemplated flocks filling the pasture of almost every farm.[27] But at that very time, sheep raising on the northern New England hills had already touched its zenith, and the size and number of flocks in the region dropped steadily thereafter. The 1,681,000 sheep which Vermont boasted in 1840 had declined to 580,000, or 64 percent, by 1870, while the number in New

[23] Benton and Barry, *Statistical View*, 109–111. See also H. F. Wilson, in the *Geographical Review*, 21:384, in regard to the small woolen establishments in the Windsor, Vermont, area at that time.

[24] Isaac Hill, *Address before the Merrimack County Agricultural Society Concord*, October 1837, p. 7.

[25] *Cheshire Farmer*, 2:156 (February 1840).

[26] *Vermont Watchman* (Montpelier, Vt.), Oct. 21, 1842.

[27] *Farmer's Monthly Visitor* (Concord, N. H.), 7:150 (Oct. 31, 1845).

Hampshire fell 59 percent, from 617,000 to 248,000, in the same period. In Maine, where new territory was still being settled, the decrease was less pronounced, from 649,000 in 1840 to 434,000 in 1870, a drop of 33 percent.[28]

Two factors influenced this decline. The first was the lowering of the protective tariff on wool in the early forties with a consequent slump in the price; the second, and more important, was the gradual increase in wool production in the West in this period, which, with better transportation facilities, enlarged the supply of wool for Western markets and depressed the price.

The wool industry of northern New England was closely linked to the protective tariff. When the tariff of 1841 lowered the wool rates there was a decrease in prices and a consequent flurry of protest from the hill-country sheepmen. The situation was temporarily eased by the higher rates of the tariff of 1842, but when all protection was removed from the better grades of wool in 1846, the producers found themselves more severely pressed than before.[29]

It was the sharpening competition resulting from the increase of Western wool production, however, which wrought the most widespread havoc upon the northern New England sheep industry, and no tariff walls could restrain that. Until the forties the West produced wool primarily for home needs, and but little of the clip appeared in the Eastern markets. Although the Erie Canal was opened in 1825, only a small amount came over that route during the following fifteen years. Most of the sheep in the West at that time were in the Ohio Valley and a long haul was necessary to deliver the wool to lake carriers. Following the opening of the Ohio and Pennsylvania canal systems in 1832–1834, however, transportation facilities were considerably im-

[28] Carman, *Special Report*, 329, 333, 342. The number of sheep in Vermont: 1840,—1,681,819; 1850,—1,014,122; 1860,—752,201; 1870,—580,347. In New Hampshire: 1840,—617,390; 1850,—384,756; 1860,—310,534; 1870,—248,760. In Maine: 1840,—649,264; 1850,—451,577; 1860,—452,472; 1870,—434,666.

[29] *Vermont Watchman*, Aug. 1, 1842; L. D. Stillwell, "Migration from Vermont," 187 (MS. Hanover, N. H., 1929), quoting Senator Jacob Collamer, in the *Congressional Globe*, 34 Congress, 3 Session, Appendix, 337; J. L. Seward, *A History of the Town of Sullivan, New Hampshire, 1777–1917*, 1:561 (Keene, N. H., 1921).

proved, and by the forties, the West began to send increasing supplies of wool via the Erie Canal. Twenty-eight times as much wool was carried on that waterway in 1845 as in 1840.[30]

The development of the Western industry was favored by the relative ease with which wool could be transported and also by the low cost of production as compared to the high cost in the East. Prior to 1860, the average expense per year to keep a sheep in the East was from one to two dollars a head, in contrast to one dollar down to twenty-five cents a head in the West.[31] With the fear that Western wool production would depress the price to a point where competition would be impossible, many northern New England farmers curtailed their flocks and a few disposed of them altogether. These disturbed conditions, in addition to the increased supply, caused the price of wool to fall in the late forties to a low of twenty-five cents a pound, one-half the sum secured in the middle thirties.[32] In some localities, attempts were made to save the day by establishing coöperative wool depots, forerunners of coöperative creameries, but few of these were successful,[33] and the farmers continued to cut down their flocks. The Census of 1850 reported a drop of one-third in the number of sheep in Vermont during the previous decade, while in New Hampshire they decreased by almost one-half. In Maine, the decline was about one-third.[34]

The "sheep mania" had driven the dairy industry into the background, but as the production of wool became less profitable the making of butter and cheese gradually assumed a position of more importance. Even in 1840 the keeping of milch cows was considered "a good business in the hill towns of New Hampshire"

[30] In 1840, about 100,000 pounds were carried; in 1845, a little less than 3,000,000 pounds. Connor, *History of the Sheep Industry*, 113.

In the face of this growing influx, the *Farmer's Monthly Visitor*, 7:9 (Jan. 31, 1846), attempted to reassure the hill-country husbandmen, saying "Certain it is, that the advantages of sheep-raising in the West are not such as to alarm our Eastern shepherds. . . . "

[31] Connor, *History of the Sheep Industry*, 113 et seq.

[32] Carman, *Special Report*, 318–320.

[33] Stillwell MS., 187.

[34] See footnote 27.

by the *Farmer's Monthly Visitor*, which declared that a farmer who kept a herd of twenty, thirty, or forty head of cattle had "frequently the road to wealth to be sure."[35] The returns from dairying tended to be more stable. By the latter forties wool had become subject to wide price fluctuations, the tendency being to concentrate on the lower levels. In the Boston market the annual changes in the price of wool in various grades were sometimes as much as 50 percent while variations of 25 percent or more were a common occurrence. On the other hand, after 1840 the wholesale price of cheese rarely varied more than 25 percent, usually it was less, sometimes as low as 14 percent, while the changes in butter prices were generally smaller than in the case of cheese.[36] Moreover, the receipts per cow from the production of butter or cheese were between thirty and sixty dollars a year, or from two to four times as much as could be secured from an equal number of sheep.[37] Thus it is not surprising that by mid-century, the hill-country wool-grower was coming to view dairying in an increasingly favorable light.

In the fifties, notwithstanding a rise in the price of wool over the low levels of the latter forties,[38] few northern New England farmers found the sheep industry yielding profitable returns. For instance, the yearly cost of keeping a sheep in Windham County, Vermont, in 1851 was from $1.25 to $1.50, while the average fleece weighed three pounds. Wool in that year sold for forty cents a pound, which amounted to an income of only $1.20 per sheep,—less than the cost of production. This situation reacted unfavorably upon sheep raising throughout the entire Northeast. Between 1850 and 1860 the number of sheep decreased more than 63 percent in the area comprising New York and the New England States,[39] although the decline in northern New England was not

[35] *Farmer's Monthly Visitor*, 2:11 (Jan. 31, 1830).

[36] Connor, *History of the Sheep Industry*, 125–126.

[37] *Ibid.*, 125. About eight wool sheep were considered equivalent to a cow in feed requirements.

[38] During the fifties, the average price was 42½ cents per pound. Carman, *Special Report*, 320.

[39] P. W. Bidwell and J. I. Falconer, *History of Agriculture in the Northern United States, 1620–1860*, 408 (Washington, 1925).

so large. Vermont lost about a quarter of her sheep, but New Hampshire's total was only a fifth smaller, while in Maine there was a slight gain during the decade.[40]

In the sixties the sheep industry of the New England hill country enjoyed a brief Indian summer. The Civil War brought boom times to the wool-grower, since by no means enough cotton could be smuggled from the South through the military lines to meet textile needs. At the same time, much woolen material, including shoddy, was used by the Union Army.[41] Local demand for wool increased rapidly as little woolen factories which had been quiescent for many years hummed with activity. "The Wilton Manufacturing Company [worsted yarn] is running full time, probably never more prosperous," reported the *Farmers' Cabinet* in 1864, and the local correspondent added cheerfully, "A new Woolen Mill has been built the past season. . . . It employs a large number of operatives. . . ."[42] As the demand for wool reached its zenith, the price advanced until the farmers were receiving a dollar or more a pound for the precious stuff.[43] Good apples from the northern New England hills were then selling at one dollar a barrel, so that a pound of wool was equal to a barrel of apples to the hill-country farmer.[44]

All of northern New England was affected by this new stimulus. In some Vermont localities the number of sheep doubled, while the annual report of the Maine State Board of Agriculture strongly advised the farmers to raise more sheep because of the high price of wool,[45] and the local historian of a hill town in New Hampshire wrote happily in 1864 "the sheep once more is heard bleating upon our hills, from which for a time she seemed banished, evidently to the detriment of the soil and the loss of the farmer."[46]

[40] See the figures for 1850 and 1860 in footnote 27.

[41] Connor, *History of the Sheep Industry*, 129.

[42] *Farmers' Cabinet* (Amherst, N. H.), Jan. 7, 1864, p. 2.

[43] Connor, *History of the Sheep Industry*, 194.

[44] F. A. Waugh, "New Farming for Old New England," in the *Country Gentleman*, 83 (36):1 (Sept. 7, 1918).

[45] Abstract of returns from the agricultural societies of Maine, in the Maine Board of Agriculture, *Annual Report* (1863) 8:66.

[46] E. C. Cogswell, *History of New Boston, New Hampshire*, 457 (Boston, 1864).

He also stated that more attention had been given to wool than to butter and cheese "within the past few years." For a while it looked as though wool production would displace the growing dairy industry, particularly in some regions especially favorable to sheep culture.[47]

The close of the war, however, brought a decline in the price of wool, for in a few years a plentiful supply of cotton was obtainable. In addition, the immense stock of woolens held by the Government was thrown on the market, and the increasing importations of large amounts of raw wool from Australia and South America offered disastrous competition to American growers.[48]

These conditions caused an immediate reduction in the number of sheep in the hill country. Between 1867 and 1870, New Hampshire sheep were sold by the thousands for from 30 cents to $1.50 a head, and shipped to Boston for slaughter,[49] while in Vermont some growers disposed of their high-grade Merinos for 75 cents to $1.50 apiece.[50] The Maine Board of Agriculture admitted in 1867 that the keeping of sheep for the growing of wool "cannot be profitably pursued for any length of time in Maine," and advised the farmers to turn their attention to other types of production,[51] while a Vermont town history published in 1869 harked back to the Golden Age of Civil War days when wool was a dollar a pound, and remarked mournfully, "now at forty cents per pound there is but little call for it."[52]

Northern New England again turned its attention to the production of butter and cheese. The Board of Agriculture for Maine declared in 1869 that dairy farming offered the most liberal income of any special farming pursued in the State,[53] while the Vermont town history quoted above observed, "The dairy interest is increasing, most of our farmers keeping cows, as butter

[47] Connor, *History of the Sheep Industry*, 129.

[48] *Ibid.*, 133–134. Between 1860 and 1870 the world production of wool increased by more than one-third, causing an oversupply by 1870.

[49] *Ibid.*, 134.

[50] Carman, *Special Report*, 320.

[51] Maine Board of Agriculture, *Annual Report* (1867) 12:34.

[52] Hiland Paul, *History of Wells, Vermont*, 13 (Rutland, Vt., 1869).

[53] Maine Board of Agriculture, *Annual Report* (1869) 14:57.

and cheese are the chief staples at present." A cheese factory had been established in this town in 1865, and by 1869 milk was brought to it from farms "more than two miles distant."[54]

A similar situation existed in New Hampshire. The town of Newport, for instance, produced in 1870, 10,880 quarts of milk for local sales, 67,979 pounds of butter, and 11,326 pounds of cheese, but only 8,140 pounds of wool were sheared there that year, while the cattle, which had been fewer in number than the sheep in the fifties and early sixties, outnumbered them 1,843 to 1,372.[55]

Although the interval between 1860 and 1865 was marked by a decided increase in the number of sheep, the decline for the remainder of the decade was so pronounced that the 1870 census returns show a loss in the three northern New England States during the sixties. The drop was largest in Vermont, one of 22 percent, from 752,201 to 580,347, and in New Hampshire the number fell 19 percent, from 310,534 to 248,760. In Maine, however, the decrease was less than 5 percent, from 452,472 to 434,666.[56]

The steady decline in the number of sheep from 1840 to 1870, it should be noted, did not automatically cause a proportionate drop in wool production. Due to an increase in the average weight of the fleeces, the amount of wool produced in the northern New England States maintained itself fairly well. Although the number of sheep in Vermont decreased 64 percent during these years, the wool clip fell but 8 percent, while the sheep in New Hampshire dropped by 59 percent and the wool production declined only 10 percent. In Maine, moreover, the 33 percent decline in the number of sheep was counterbalanced by an increase of 21 percent in the amount of wool sheared.[57]

[54] Paul, *History of Wells*, 13.

[55] Edmund Wheeler, *The History of Newport, New Hampshire*, 246 (Concord, N. H., 1879).

[56] See footnote 27.

[57] Pounds of wool sheared in Vermont: 1840,—3,699,235; 1850,—3,400,717; 1860,—3,118,950; 1870,—3,102,137. In New Hampshire: 1840,—1,260,517; 1850,—1,108,476; 1860,—1,160,222; 1870,—1,129,442. In Maine: 1840,—1,465,551; 1850,—1,364,034; 1860,—1,495,060; 1870,—1,774,168. Carman, *Special Report*, 329, 333, 342.

By means of careful breeding it became possible to grow more wool on the individual animals. The average weight of wool sheared per head in Vermont in 1840 was 2.2 pounds, while by 1870 it amounted to 5.34 pounds, an increase of 143 percent, the largest in northern New England. In New Hampshire, it rose 124 percent, from 2.04 pounds in the former year to 4.54 in the latter, and in Maine, 77 percent, from 2.25 to 4.00 pounds.[58] This increase in the yield per sheep was responsible in large part for sustaining the industry during the latter part of this period. The hill-country farmers whose flocks produced more than the average weight of wool per head were able to make some profit from their sheep even after the Western competition had become severe.

SHEEP BREEDING

A further factor which aided in keeping sheep farming alive in the sixties and even into the seventies was the development of Merino breeding. The introduction of the famous Merino breed from Spain into the New England hill country began in the second decade of the nineteenth century. The Spanish Government had guarded the breed jealously. The invasion of Spain by Napoleon, however, not only involved France and Spain in war, but caused factional strife in the latter country. Napoleon seized both the estates and the flocks of the powerful nobles who did not side with him, while the Spanish Junta confiscated the property of those who did not support the national cause. It thus became possible to purchase and to export some of the finest Merino sheep.[59]

The American consul at Lisbon, William Jarvis, convinced that the extended introduction of this fine-wooled breed into the United States would materially increase the prosperity of the country, received permission in 1809 to export from Spain two

[58] Average weight of wool per fleece in Vermont: 1840,—2.20; 1850,—3.35; 1860,—4.14; 1870,—5.34. In New Hampshire: 1840,—2.04; 1850,—2.88; 1860,—3.73; 1870,—4.54. In Maine: 1840,—2.25; 1850,—3.00; 1860,—3.30; 1870,—4.00. Carman, *Special Report*, 329, 333, 342.

[59] *Ibid.*, 172.

hundred rams of the Escurial royal flock. These were sent in different shiploads to Boston, and many of them sold for as much as one thousand dollars. Returning to his home in Boston in 1810, Jarvis moved to Weathersfield, Vermont, the next spring, taking with him all his animals, which, according to a contemporary account, included "selected Merinos (about 400), Dutch cattle, Portuguese swine, goats, donkeys, etc., a Spanish shepherd and a noble shepherd dog."[60] Jarvis lived in Weathersfield until his death in 1859 at the age of eighty-nine years. He had bred sheep in that town for forty-eight years.[61]

During the mid-century decades the Merino sheep attained a higher degree of perfection in northern New England than in any other section of the United States. Skill in breeding, together with a climate which brought out the heavier wool characteristic, gave the region a wide reputation for producing superior wool sheep, in contrast with the mutton variety. The cold weather afforded an advantage over competition from milder climates, for the natural law in animal growth, that the covering of an animal adapts itself to the temperature of its habitat, held true as to sheep bred in the hill country. When raised in more southern latitudes, the heavy-wooled Merino gradually lost its unecessary covering, and after a few generations the offspring exhibited the thick coat to a less-marked degree.[62] Moreover, in northern New England, and particularly in Vermont, where the greatest stress was put on their breeding, the Merinos developed a heavy yolk, a greasy secretion which covered the fleece to a depth of about one-eighth of an inch, some of which survived the washing that was given all wool before the dealers paid for the product. Since wool was sold by weight, the demand for the heavily fleeced animals with an excessive secretion of yolk was keen.[63]

The business of raising and selling blooded Merinos, both rams and ewes, reached its highest development in Vermont, but there

[60] *Ibid.*, 173.

[61] M. P. S. Cutts, *The Life and Times of Hon. William Jarvis, of Weathersfield, Vermont, passim.* (New York, 1869).

[62] Carman, *Special Report*, 320.

[63] Connor, *History of the Sheep Industry*, 131.

were a few breeders in Maine, and a larger number in New Hampshire, especially in the Connecticut River Valley towns.[64] The Vermont strains, however, were considered the finest, and there are frequent instances in the contemporary accounts of the purchase by Maine and New Hampshire wool growers of Vermont stock to improve their herds.[65] In 1845, for instance, the *Maine Farmer* reported that a group of farmers along the Kennebec River had imported some blooded Merinos from Weybridge, Addison County, Vermont, and added, "The Vermonters . . . have pursued the business of wool-growing much more systematically than it has deen done . . . in Maine. The consequence is better flocks."[66] The dependence on Vermont for breeding stock continued. In 1863, the Maine Board of Agriculture, emphasizing the need for better sheep, urged the farmers of their State "to visit New Hampshire and Vermont to insure the best selection."[67]

During the six decades preceding 1870, the percentage of wool to live weight for Vermont sheep more than trebled, the proportion being 6 percent in 1812, 15 percent in 1844, and 21 percent in 1865. William Jarvis of Weathersfield, whose flocks averaged four pounds of washed wool per year per sheep from 1811 to 1826, announced in 1844 that he had rams whose clips amounted to seven and one-half pounds each, or eleven and one-quarter pounds of unwashed wool.[68] By mid-century many Vermont sheepmen were producing prize rams which sheared as much as twelve pounds of unwashed wool.[69]

[64] New Hampshire Board of Agriculture, *Centennial Papers: One Hundred Years' Rural Progress, and Reports and Addresses Relative to the Centennial Exhibition, 1876,* prepared by J. O. Adams, 10 (Concord, N. H., 1877). Hereafter, this work is cited as *One Hundred Years' Rural Progress. Farmer's Monthly Visitor,* 8:38 (Mar. 31, 1846), describes the breeding done by the Shakers in their community village at Enfield in west-central New Hampshire. They had a "flock of strong, healthy looking sheep," each of which bore a "thick coat of wool."

[65] *One Hundred Years' Rural Progress,* 10; C. C. Lord, *Life and Times in Hopkinton, N. H.,* 223 (Concord, N. H., 1890).

[66] *Farmer's Monthly Visitor,* 7:18 (Feb. 28, 1845), quoting the *Maine Farmer.*

[67] "Abstract of Returns from the Agricultural Societies of Maine," in the Maine Board of Agriculture, *Annual Report* (1863) 8:63.

[68] Carman, *Special Report,* 307.

[69] Stillwell MS., 225, quoting from Daniel Needham, *Address at the Wool Growers' Convention, Rutland,* 10 (1862).

There were hill-country farmers outside of Vermont, however, who established reputable names for themselves as skilled breeders. In 1838, for example, at the fair of the American Institute in New York, Stephen Sibley and Joseph Barnard, two farmers from Hopkinton, New Hampshire, were awarded a silver medal for the best exhibition of fleeces of American wool.[70] Many years later, a New Hampshire wool grower announced at an agricultural meeting at Lyme that a Merino ram which he had purchased in Vermont for $100.00 was not giving as good results as one he had obtained for $10.00 from a local breeder.[71]

By the fifties, a large number of Vermont farmers, finding that they could make more money by breeding fine sheep to sell than by raising wool, were beginning to be less interested in the number of pounds of wool they produced per year, and still less in the mutton marketed,[72] and this situation was intensified during the sixties and seventies, when the "Merino mania" reached its zenith.

Wide publicity aided in stimulating interest in the hill-country breed. The fame of the strain spread across the Atlantic in 1863, when George Campbell, a leading Vermont shepherd farmer, exhibited twelve animals at an agricultural fair in Hamburg, Germany. Although in competition with over seventeen hundred European Merinos, including sixty from the flock of Napoleon III, the New England flock took two first prizes and outranked all other Merino exhibits for length of staple and weight of fleece.[73]

The high prices paid for wool during the Civil War years gave a strong impetus to the breeding industry. Farmers turned to wool production as a major enterprise, even on the fertile prairies, with flocks of two thousand to five thousand head. Wool growers

[70] Lord, *Life and Times in Hopkinton*, 223.

[71] New Hampshire Board of Agriculture, *Annual Report* (1873) 3:376.

[72] J. L. Heaton, *The Story of Vermont*, 179 (Boston, 1889). "In Vermont," reported the Superintendent of the Seventh Census, "the greatest attention has been given to sheep-breeding." U. S. Census Office, *Seventh Census*, 1850, *Report of the Superintendent of the Census for December 1, 1852*, p. 67 (Washington, 1853).

[73] Campbell's sheep were sold at the end of the fair to a Silesian breeder. Conner, *History of the Sheep Industry*, 130.

from all over the country, and even from foreign lands, sent to the hill country and especially Vermont for Merino breeding stock, and the sheepmen there reaped a rich harvest as the demand increased. As much as from $3,500 to $5,000 per head was reported for the sale of extra-fine rams, while $800 or more was frequently received. For the service of the most noted rams from $2,000 to $3,000 a season was charged, while extra-fine ewes commanded from $100 to $300 a head. One Vermont farmer is said to have refused $10,000 for his best ram on the ground that he could not risk deterioration in his flock by letting him go, while another, it was reported, declined to sell his flock of two hundred head for $50,000.[74]

In these boom days outstanding rams often became veritable personalities in the eyes of the rural community. When a famous ram died, the local papers printed eulogistic notices, mentioning how much the sheep would be "mourned." For example, in the Middlebury, Vermont, *Register* of August 9, 1865, this obituary appeared: "Mr. Hammond's best ram, Gold Drop, died on Sunday night. This sheep probably had a better reputation than any other that ever lived. Mr. Hammond could at any time for years past have taken $10,000 for him. He was valued at $25,000. He will be sincerely mourned by all sheep breeders at home and abroad."[75]

At the height of the "Merino mania" deceptions were not infrequently practiced, so insistent was the demand. New York sheep were sometimes shipped into Vermont and sold as being of the Vermont strain. Moreover, the "Cornwall finish,"—a mixture of burnt umber, lampblack, and linseed oil,—was occasionally applied to inferior animals to give their fleece the characteristic color of the high-bred Vermont Merino with its heavy secretion of yolk. The application was often so successful that none but flockmasters well acquainted with the breed could detect it. The sheep were then shipped to unsuspecting Western

[74] *Ibid.*

[75] Quoted by Waugh, in the *Country Gentleman*, 83 (36):18 (Sept. 7, 1918). Middlebury was the shire town of Addison County, the center of the sheep-breeding industry.

farmers, the "Cornwall finish" staying on the wool until rains washed it off. Every animal that looked like a Merino and had a greasy fleece was readily bought.[76]

While the decline in the price of wool after the Civil War brought a decrease in the demand for Merinos, a few professional breeders in the hill country were able to continue their business profitably for a number of years. Shipments were made in the seventies, particularly from Addison County, in west-central Vermont. In 1874, this region exported blooded Merinos to the Territory of Washington, and in 1876, to Texas and elsewhere. In 1877, Middlebury, the shire town, sent out twenty-nine carloads of purebreds and two years later, forty-one carloads of rams were exported to the Southwest.[77]

Although the breeding of fine-wooled sheep yielded good returns to a small number of progressive farmers who specialized in it, most of the hill-country husbandmen continued to reduce their flocks, many selling out entirely. The number of sheep in Vermont declined from approximately 580,000 in 1870 to 440,000 in 1880, while the wool production fell from 3,100,000 to 2,550,000 pounds, in spite of the fact that the average weight of wool sheared per head rose from 5.8 pounds to 6.1. In New Hampshire the sheep decreased from 249,000 to 212,000, and wool production from 1,130,000 to 1,060,000 pounds, although the weight of the average fleece increased from 4.54 pounds up to 5.00. In Maine, however, where the inhabitants of the more recently settled portions in the central and northern sections of the State were adding to their flocks, the number of sheep mounted from 435,000 to 566,000 during the same decade, and wool production from 1,800,000 pounds to 2,800,000, part of which can be attributed to the increase in the weight of wool per head from 4.00 pounds to 4.90.[78]

The eighties brought a sharp decline in Merino breeding,

[76] Connor, *History of the Sheep Industry*, 130–131. Cornwall is a town in Addison County, Vermont.

[77] Carman, *Special Report*, 321.

[78] *Ibid.*, 329, 333, 342. The exact figures for the wool production of Vermont are: 1870,—3,102,137; 1880,—2,551,113. New Hampshire: 1870,—1,129,442; 1880,—1,060,589. Maine: 1870,—1,774,168; 1880,—2,776,407.

although there was a short-lived revival in the latter years of the decade when a large number of purebred rams were exported from Vermont to Australia,[79] Argentina, and South Africa. The most important factor in the decreased demand was the pronounced shift to the mutton type of sheep. As early as the middle seventies the New Hampshire Board of Agriculture observed, "whatever breed we adopt, we can only hope for profit in a mutton breed."[80] The low price of wool in the middle eighties hastened the transition to mutton rams in the range country of the West, and with this came the evolution of the Delaine and other Merino strains with a good grade of wool on a fair mutton carcass. When Western sheepmen introduced this new blood, and the flockmasters of the antipodes abandoned the Vermont for other Merino types, the market for the hill-country sheep-breeders practically disappeared.[81]

The shift from wool to mutton sheep in New England is shown very clearly by comparing the statistics for 1840 and 1890. In 1840 over 70 percent of the approximately four million sheep in the region were either Spanish or Saxony Merinos and their grades, and about 29 percent were unimproved native stock, while the English mutton breeds constituted less than 1 percent. In 1890, 26 percent were Merinos and their grades, and only 12 percent unimproved, the English mutton breeds making up the remaining 62 percent. It was estimated in the latter year that of the 192,824 sheep in New Hampshire, 20 percent were the common or native type and crosses on them, 20 percent were Merinos of various grades, and 60 percent of English blood, with this type increasing rapidly at the expense of the others. In Maine the Merinos were being supplanted by Oxforddowns, Hampshiredowns, and Southdowns, weighing 225 pounds, and

[79] It was found that these rams when crossed with Australian ewes gave increase in the weight and density of the fleece. Carman, *Special Report*, 329.

[80] New Hampshire Board of Agriculture, *Annual Report* (1874) 4:189. In the middle eighties the same Board advised growing sheep which would produce mutton as well as wool. *Annual Report* (1883) 13:318.

[81] The Delaines were a product of eastern Ohio, western Pennsylvania, and northern West Virginia during the seventies and thereafter. Connor, *History of the Sheep Industry*, 149, 163.

Cotswolds running up to 244. By 1890, 50 percent of the sheep in that State were of English strains.[82]

The infiltration of mutton stock into Vermont was a slower process. The tradition of breeding wool-bearing sheep was so firmly intrenched in the minds of her farmers that they saw no reason for changing to meet the demands of a new market. In 1892, the United States Department of Agriculture noted that although the mutton type was the demand of the day, it was not generally popular with the breeders of Vermont.[83] In the same year the register of the Vermont Merino Sheep Breeders' Association commended its members for not having been "induced to give up the great improvements . . . heretofore attained in the destiny [density] and value of their fleeces," and warned them not to undertake a change in such haste as "to create a large, long-legged, gaunt, imperfect shaped sheep, neither profitable to grow wool or produce mutton."[84]

During the last two decades of the century the number of sheep in northern New England fell steadily. In Vermont they decreased from 440,000 in 1880 to 334,000 in 1890, and to 297,000 in 1900,—less than one-fifth the number at the height of the industry in 1840,—while in New Hampshire they fell from 212,000 in 1880 to 132,000 in 1890, and to 105,000 in 1900, also less than one-fifth of the 1840 figure. The 566,000 sheep in Maine in 1880 had dropped to 370,000 by 1890, but by the end of the century the total had risen to 420,000, about one-third of the 1840 returns.[85]

THE TREND FROM SHEEP TO DAIRY CATTLE

Competition from cheap wool produced in the West was the major factor in the decline of sheep raising during these years, as it had been in the fifties and sixties. "Here in New Hamp-

[82] Carman, *Special Report*, 333, 342–343. Among the English breeds were the Southdown, the Cotswold, the Hampshire Down, and the Shropshire Down.

[83] *Ibid.*, 327–328.

[84] *Ibid.*, 323, quoting from the Vermont Merino Sheep Breeders' Association, *Register*, 4:2 (Rutland, 1892).

[85] Connor, *History of the Sheep Industry*, 329. U. S. Bureau of the Census, *Fourteenth Census*, 1920, vol. 5, "Agriculture," p. 575.

shire," declared the State *Agricultural Report* in 1880, "where our sheep have to be housed and fed six months of the year, we cannot realize that profit which the great ranch-owners of the southwestern territories do, where the sheep run and graze . . . nearly the whole year."[86]

Another element in the decline of sheep raising, felt seriously for the first time in this period, was the continual loss from the ravages of dogs among the flocks. After making allowances for other deterrent factors, these depredations were probably the most important reason for the selling of thousands of sheep. Many a hill-country farmer gave this plague as the immediate reason for disposing of his flock. "Dogs are the most fatal enemy of our sheepfolds," declared a New Hampshire commentator in 1877.[87] As the canines increased, the number of defenseless animals killed by them increased.[88] Once a dog acquired a taste for sheep, he rarely ever lost it. Dog-tight fences were expensive to construct and difficult to maintain. The effect was severest on the small flocks, for the farmer with a large number of sheep might hire a shepherd, or herd them at night in a dog-proof enclosure, but even this was very costly, and the general attitude in the face of continued raids was one of discouragement.

Although it had become customary by the end of the century to reimburse the owners from public funds for sheep so killed, only the price of a common sheep was usually allowed, and the farmers with small flocks of purebred animals were insufficiently compensated. Moreover, those owning ordinary grades were likely to find, after the best part of their flocks had been killed in a single night, that the town sheep-funds were exhausted. Some idea of the effect of these devastations may be gained by reading the testimony of the secretary of the Massachusetts Board of Agriculture before the United States Industrial Commission in 1900: "The after effect of fright upon sheep is something wonderful. I went to one farmer's house where his sheep had been mutilated by dogs and I saw them in different conditions. It was enough

[86] New Hampshire Board of Agriculture, *Annual Report* (1880) 10:443.
[87] *One Hundred Years' Rural Progress*, 13.
[88] *New Hampshire Agriculturist* (Concord, N. H.), 1:34 (June 1895).

to make anyone sick. . . . I . . . asked that he [the farmer] be paid liberally, and the award went to the county commissioners and was paid. Six months later he asked if I would come to his place. I went over there and saw his flock of sheep, and he had not been half remunerated for the loss. The number of sheep that had produced no young and the quality of the young showed the after effect of the fright on the flock . . . . and there was no remedy whatever; the farmer had to suffer the loss. There are no sheep upon that farm now."[89]

While the sheep industry on the whole did not continue to be the main source of income after the seventies, in certain localities it persisted longer than in others. In Lyme, New Hampshire, for instance, it was the chief occupation until 1890, and, while the number of sheep in the town reached its height in 1855 with over 13,000 head, up to 1886 they never fell below 6,000.[90] Of the seventy-four farms in Lyme run by "live stock breeders and dealers," listed in the *County Gazetteer* which was issued in the latter year, sixty-eight advertised sheep alone, while only six specified cattle or hogs in addition.[91] Again, in the Windsor region of Vermont, sheep husbandry was of major importance as late as 1884. The compiler of the *Gazetteer of Windsor County*, published in that year, gathered detailed information concerning the farms and other enterprises in each township. The small town of West Windsor, which contained eighty-three farms, averaging about 140 acres each, reported sixty flocks of sheep totaling 6,741 head, an average of more than 112 animals per flock. Seventy-five percent of her farms still kept sheep, and depended upon the sale of wool for a considerable part of their living. It is interesting to note that the *Gazetteer's* questionnaire covered only three points: the number of sheep on the farm, the

[89] U. S. Industrial Commission on Agriculture and Agricultural Labor, *Report*, vol. 10, "Agriculture," 899 (Washington, 1901).

[90] J. W. Goldthwait, "A Town that Has Gone Downhill," in the *Geographical Review*, 17:546–547 (October 1927).

[91] *Ibid.*, 547, based on Hamilton Child, ed., *Business Directory of Grafton County, N. H., 1885–1886*, 341–342 (Syracuse, N. Y., 1886). See also the section on the Town of Lyme by P. H. A. Claflin in the same editor's *Gazetteer of Grafton County, N. H., 1709–1886*, 517–551 (Syracuse, N. Y., 1886).

number of acres, and the number of trees in the sugar orchard. Dairying was not considered of sufficient importance to warrant special investigation.[92]

In most areas, however, the inhabitants were coming, by force of circumstances, to depend upon the dairy industry for their greatest source of income. In the sections nearer southern New England, dairying already had a firm footing. Although other portions of the southern part of the hill country were affected,[93] this tendency was particularly noticeable in lower New Hampshire. Londonderry reported to the Board of Agriculture in 1871 that its citizens were dependent upon, in order of their importance, "Milk, butter, poultry, eggs, hay, apples, potatoes, sales of stock, wood and lumber," and Chester and Sandown, in the same region, gave a similar account, while Hollis, on the southern border, noted, "Our farms are about equally divided in raising stock and selling milk."[94] Other New Hampshire towns turned to dairying in this decade and the next. Many a farmer of Hillsborough, west of Concord, for instance, turned at this time to the making of butter. This was shipped weekly by rail, and brought "a good price and a sure sale during the winter months."[95] In the late eighties, a farm at Wilmot, New Hampshire, which kept about two hundred and fifty sheep in the sixties, had shifted to the production of milk, supporting about twenty-five cows for that purpose.[96]

In Maine, as early as 1868, the State Board of Agriculture advised farmers to give more attention to dairying, and less to the raising of sheep. In a section devoted to "The Comparative Profit of Cattle and Sheep," the Board's *Report* for that year

[92] Hamilton Child, ed., *Gazetteer and Business Directory of Windsor County, Vermont, 1883–1884*, 541 et seq. (Syracuse, N. Y.); H. F. Wilson, in the *Geographical Review*, 21:385–386 (July 1931).

[93] See, for example, Paul, *History of Wells*, 13; Joslin, *History*, 81.

[94] New Hampshire Board of Agriculture, *Annual Report* (1871) 1:36, 43, 45, 98, 101.

[95] D. H. Hurd, ed., *History of Hillsborough County, New Hampshire*, 406 (Philadelphia, 1885).

[96] H. H. Metcalf, "A Typical New England Farmer," in the *Granite Monthly*, 20:382 (June 1896). Wilmot is still farther north.

contained some convincing statistics. Stating that the cost of keeping one cow for a year was approximately equal to that of eight sheep, it estimated that the gross annual income from five cows would amount to $357.50, of which $40 would come from the sale of calves, $250 from cheese, and $67.50 from butter. On the other hand, forty sheep would bring in about $210, $120 from the sale of lambs, and $90 from wool, leaving a difference of $147.50 in favor of the cows.[97]

Still other factors led the farmers of northern New England to place more attention on the production of butter and cheese. Dairying enabled the husbandman to utilize all the family to a degree not remotely possible in wool production. Furthermore, the price of wool, as in the decades from 1840 to 1870, was constantly subject to wide fluctuation, while there was a steadily growing demand for dairy products from nearby industrial areas.[98]

Nevertheless, the hill-country farmer gave up sheep raising with genuine regret. Indeed, so strong was the interest in maintaining the industry that in the seventies local Granges held debates as to the advisability of turning from sheep to cows. At a meeting of the Patrons of Husbandry in South Weare, New Hampshire, in 1878, for example, one advocate of the former testified that sheep paid best by a very large amount; that one cow would eat as much hay as twelve fine-grade sheep; and that the latter would "get their living one to two months longer in pasture than cattle." Moreover, they yielded "a three-fold income,—lambs, wool, and mutton," an advantage which no other stock afforded. His opponent declared against continuing sheep raising. His animals were constantly afflicted with the foot-rot; in proportion to the amount of food consumed, less manure was produced by them than by cattle, thus lessening the

[97] Maine Board of Agriculture, *Annual Report* (1868) 13:9–10. The Board calculated that each ewe would have one lamb which would sell for $3.00, while the forty sheep would shear 160 pounds, selling at 56¼ cents a pound.

[98] Connor, *History of the Sheep Industry*, 117. In the last four decades of the nineteenth century, the rural population of New England decreased 32 percent, while the number of consumers increased 110 percent. A. W. Gilbert, "What About Milk," in *Current Affairs* (Boston Chamber of Commerce), 9 (41):2 (Feb. 10, 1919).

yield of hay, corn, and potatoes by lack of fertilizer; and sheep were short-lived while cows were "at their best at twelve years old." The most telling argument was reserved for the last. The speaker said that he had plenty of wool on hand and no sale for it.[99]

TWENTIETH CENTURY REMNANTS OF THE SHEEP INDUSTRY

At the turn of the century and during the decades immediately following, determined efforts were made to revive sheep raising, especially for the rougher hill country. "Many of these [$5-an-acre] farms," explained a member of the Vermont Board of Agriculture in 1900, "that were well adapted to sheep industry were not adapted to dairying; . . . as a consequence of leaving the sheep industry, there was no good use to put these farms to."[100] Frequent comparisons were made by sheep enthusiasts between the amount of care required by sheep and that necessary for milch cows. A New Hampshire farmer declared in 1918 that there was a place for sheep with the man who did not like to be tied down to dairy cattle,[101] and in 1918 a successful sheep raiser of Plainfield, New Hampshire, in the hills above the Connecticut River, stated that while the dairyman chased the cow twice a day, sheepmen had time for other activities. Besides caring for his animals, he raised about $500 worth of fruit each year, ample hay for his livestock, and enough to sell to pay for the grain he had to buy.[102]

[99] New Hampshire Board of Agriculture, *Annual Report* (1878) 8:586–589. After the debate, the question was submitted to the members of the Grange on its own merits, with a nearly unanimous vote in favor of sheep.

[100] Testimony of V. I. Spear in the U. S. Industrial Commission, *Report*, vol. 10, "Agriculture," 410. The $5-an-acre farms were those which "are usually some distance from town and from school, and have social disadvantages. Some of them are rather rough and not very well adapted to the use of farm machinery, and a great many of them are quite fertile and productive farms." *Ibid.*, 407. See also, E. G. Ritzman, *The Sheep Industry in New Hampshire*, 1 (Concord, N. H., 1917).

[101] Freeman Tilden, "Going or Coming? New England Is Getting Back on Her Agricultural Feet," in the *Country Gentleman*, 83 (52):25 (Dec. 28, 1918).

[102] Interview of E. C. Daniels, in the *New England Homestead*, 78 (26):10 (June 28, 1919).

One recognized authority on the sheep industry admitted that although there was room for considerable increase in the flocks in the hill country through the utilization of those parts of the pasturage area too rough for cows, the expense of providing winter feed would decidedly limit their size. He felt that raising high-grade lambs for the southern New England markets would be the most profitable form of the business, and therefore believed that the future gains in the number of sheep in New England would probably be in the form of small flocks grazed largely as scavengers on surplus pasture land for the production of lambs to be marketed in the fall, or kept for the raising of the highest grades of early or winter lamb.[103]

Notwithstanding the efforts to revive the industry, the number of sheep in the hill country decreased steadily throughout the three decades following 1900. Between 1900 and 1930 they declined 83 percent in Vermont, which reported a total of 296,000 sheep in 1900, 118,000 in 1910, 60,000 in 1920, and 51,000 in 1930. New Hampshire showed a drop of 80 percent during these years, counting 105,000 in 1900, 43,000 in 1910, 28,000 in 1920, and 21,000 in 1930; while Maine lost 76 percent during the same decades, 420,000 being reported in 1900, 206,000 in 1910, 119,000 in 1920, and 99,000 in 1930.[104]

A number of factors were instrumental in causing this decline. Most important was the fact that the number of farmers concentrating on dairying was constantly increasing. The attitude of the average Vermonter toward sheep raising in 1912 is shown in the answers to a questionnaire sent out by a student at the State Agricultural College of the University of Vermont to representative farmers who still had flocks. In answer to the question, "What in your opinion is the outlook for sheep industry in Vermont?", the prospect was scarcely ever reported as "good", although frequently it was "fair." Of special interest is the reply

[103] Connor, *History of the Sheep Industry*, 165.

[104] U. S. Bureau of the Census, *Fourteenth Census*, 1920, vol. 5, "Agriculture"; *Fifteenth Census of the United States, 1930*, "Agriculture," vol. 2, part 1, The Northern States, Maine, p. 133; New Hampshire, p. 155; Vermont, p. 179. (Washington, 1932.)

of a farmer in Randolph, who wrote, "Fair, but I am quite interested in the outlook of ship[p]ing milk to Boston and think it will hurt the sheep business here."[105]

Another hindrance to the revival of the industry was lack of experience, for very few farmers of the present generation know much about the keeping of sheep, and these animals probably require the most definitely practical personal knowledge and the most serious attention, especially in the lambing season,[106] of any kind of livestock.[107] Talks the writer had with farmers in the hill town of Reading, Vermont, in the summer of 1929, emphasized this point. One old farmer stated bluntly, "We can't g'back t'sheep; farmers now'days dunno haow t'take care ov'em." In addition, the margin of profit in the work is so slight that the hill farmer would have to expand his pasturage and increase his small herd before he could depend on selling enough wool to yield sufficient returns. Moreover, if he has an interest in bringing back a flock of sheep to his farm, there is always the dog menace, a threat which deters many a hill farmer from utilizing waste pasturage for sheep cropping.

The days have passed when the hill-country farmer can rely on his sheep to produce the major part of his livelihood. No longer, as the writer of a local history in the last century fondly observed, does "the click of the shears as the wool is clipped make sweet music in the barns."[108] Sheep are a frontier crop, and the frontier in this sense has left the New England hills. In the course of time, it may come back; the presence of an increasing number of abandoned farms in the rougher and more isolated areas bears witness to the possibility of its return.[109] In such an event, the

[105] K. H. Atwood, "Sheep Husbandry in Vermont," (MS. Burlington, Vt., 1912). Questionnaire of C. A. Webster.

[106] See, for example, the grimly realistic description by Virginia Black, "Spring Lamb," in *Harper's Magazine*, 164:674–681 (May 1932).

[107] Carman, *Special Report*, 340. Waugh, in the *Country Gentleman*, 83(36):18.

[108] William Little, *History of Weare, New Hampshire, 1735–1888*, 465 (Lowell, Mass., 1888).

[109] An illustration of the utilization of a rough and isolated region, on which crop cultivation had long been abandoned, was the shipment of 1,100 sheep from drought-stricken Nebraska to Wakefield, New Hampshire, in August, 1934. There the owner of the sheep had purchased 840 acres of land,—a wild stretch of

"click of the shears" may again make "sweet music in the barns" that are left standing.

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scrub oak and sweet fern. This was fenced and the edges of three ponds cleared for watering purposes. A dozen men were employed to cut several hundred acres of hay lands, which had not been touched for many seasons, to provide winter feed for the flock. See the Boston *Herald*, Aug. 30, 1934.

AGRICULTURAL POLICY IN NEW FRANCE

THE FRENCH COLONIAL SYSTEM

The governmental reorganization incident to Louis XIV's assumption of personal control of administration included the institution of "royal government" in New France in 1663, and this in turn comprehended the development of agriculture within the imperial system.[1] This development was confused by the struggle with the English for world dominion, a conflict which gave peculiar significance and character to Canadian history and resulted in the transfer of Canada to the British Crown in 1763.

The mercantilist policy motivated agricultural development in New France. The essential difference between French mercantilism and the English variety on the mainland of North America was that the French began the effective application of their policy earlier than did the English, and consequently never had to deal with an independent folk to whose autonomous ambitions the belated enforcement of a colonial system was a deliberate challenge. But this same French surveillance, precluding rebellion, prevented the development of colonies as vigorous as those of the English. This paper introduces the subject of agricultural policy in this centralized, dependent, colonial system.

Agriculture in Canadian history has little of the romance associated with its rival, the fur trade, and it has been much less

[1] Most of the material for this paper has been gathered in the copies of the Correspondence Générale of the Department of Marine and Colonies (Paris) in the Public Archives of Canada at Ottawa. The documents referred to are principally in the volumes of Series B (from France) and Series C-11 (from New France). The rather unsatisfactory calendars of these series are available in part in the annual reports of the Dominion Archivist for the years 1885, 1886, 1887, 1899 (supplement), 1904, and 1905. Page references to documents cited in this article can be found in these calendars.

For the French background, see H. Hauser, "The Characteristic Features of French Economic History from the Middle of the Sixteenth to the Middle of the Eighteenth Century," in the *Economic History Review*, 4:257–272 (October 1933).

vocal in Canadian tradition and folklore; but the French-speaking Canadians of today are essentially an agricultural folk, and it is as *habitants* rather than as *coureurs-de-bois* that their social character and institutions have arisen. In the soil and not in the "bush" remains their continuing *élan vital.*

The rivalry of agriculture and fur trade for the energies of the French colonists was confused by the early subjection of agricultural New France to the feudal lordship of fur companies. This confusion was never resolved so long as the overlordship was effective. Only with the coming of "royal government" in 1663 did agriculture have authority on its side; even then the authority was uncertain and easily tempted into the romantic speculations of fur.[2]

None the less it had been realized since the days of Samuel de Champlain, himself a fur-trading official, that agriculture could be the only permanent social basis for New France. As the sources of the fur trade became more remote and as speculative disasters lowered its prestige in the imperial economy, agriculture emerged, not only as the basis of colonial society but as a new source of imperial wealth and convenience. To furs, fish, timber, and naval stores—always disappointing in Canada—were added vegetables, wheat, flour, biscuits, and also beef, pork, and beer,—all products of an agricultural community. On this basis French colonial garrisons were rationed from Canada, and a three-cornered trade developed between Canada, the French West Indies, and the Mother Country. Île Royale (Cape Breton) became the entrepôt of this trade at the bottle-neck of New France.

THE FOUNDATIONS

The work of Louis XIV in colonial affairs is forever associated with the name of Colbert, and Colbert's greatest agent in Canada,

[2] On the early period when the conflict was confused, see H. P. Biggar, *The Early Trading Companies of New France* (Toronto, 1901). For the narrative of the fur trade in this period, see H. A. Innis, *The Fur Trade in Canada*, sect. 2 (New Haven, 1930). On the effectiveness of the feudal system, see W. B. Munro, *The Seigniorial System in Canada; A Study in French Colonial Policy*, introduction (*Harvard Historical Studies 13*. Cambridge, Mass., 1907).

Jean Talon (1665–1672), the first intendant in the colony.[3] Given exceptional authority, Talon treated his office as a provincial autocracy, in the manner of Champlain, rather than as a delegated intendancy.[4] He liked to refer to the new "kingdom" which he was founding in America for His Majesty.[5] Critical of the feudal subjection to a fur company,[6] Talon devoted his talents to what is piously remembered as the first successful immigration policy of Canada. An increase in the number of settlers was the essential first stage in agricultural development,[7] and the population grew from less than twenty-five hundred to approximately seven thousand. Under existing circumstances he worked for a frontier military society which was to be primarily agricultural.[8]

If the ultimate objective of an agricultural colony was to be realized the method of granting seigniories had to be changed. The Company of One Hundred Associates had ignored the King's assumption that grants would be made only to actual emigrants to New France and had given large tracts of land, some of them containing a hundred square miles or more, to directors and friends in France. One received the entire Island of Orleans; others were rewarded with large seigniories covering the best lands on both shores of the St. Lawrence River. Of the sixty grants by the Company during the years from 1632 to 1663 not more than six were made to actual settlers. As a result the total area of cleared land was only about four thousand arpents when Louis XIV took the colony from the Company in 1663. Talon

[3] Talon, in Canada, 1665–1668, and 1670–1672. Thomas Chapais, *Jean Talon, Intendant de la Nouvelle-France* (Québec, 1904), and his *The Great Intendant; A Chronicle of Jean Talon in Canada, 1665–1672* (Toronto, 1914). Talon's letters in the *Annual Report* of the Archivist of the Province of Quebec, 1930–1931.

[4] On the detailed jurisdiction of the Intendant, see Gustave Lanctot, *L'Administration de la Nouvelle-France*, ch. 4 (Paris, 1929).

[5] Talon, 4 Oct. 1665, C-11, vol. 2.

[6] *Ibid.*

[7] Ivanhoe Caron, *La Colonisation du Canada sous la Domination Française* (Québec, 1916); Émile Salone, *La Colonisation de la Nouvelle-France* (Paris, 1905).

[8] E.g. in *Édits, Ordonnances Royaux, Déclarations et Arrêts du Conseil d'État du Roi Concernant le Canada* (Québec, 1854–56), see vol. 2 which bears the title *Arrêts et Règlements du Conseil Supérieur du Québec, et Ordonnances et Jugements des Intendants du Canada*, p. 28 *et seq.* for a typical scheme, never enforced in detail. Hereafter, this work is cited as *Édits et Ords.*

took steps to concentrate the restless colonials, and made land concessions conditional on exploitation and settlement within three years for seigniors, and four in the case of *habitants*.[9] He was also instrumental in keeping the tithe limited in range and reduced to one-half the prevailing rate in France.

The first necessity was providing the new colonists with subsistence, and although this was an urgent matter,[10] Talon was also ambitious for expansion. He brought the first horses to Canada and introduced sheep and cattle. He hoped to establish a breed of sheep adequate for a vigorous woolen industry.[11] The slaughter and use of cattle were controlled for breeding purposes. Significantly, Talon was the first official to urge the growing of hemp and flax, seven barrels of seed being planted with satisfactory results.[12] Canadian hemp proved as good as that of Lower Brittany.[13] Industries immediately dependent on agriculture were also encouraged. The flour mills were reorganized with reference to the interests of the cultivators.[14] A successful tannery was set up, and a brewery was started under enthusiastic auspices, though it eventually failed.[15] Talon hoped to provide a cheaper and more wholesome substitute for *eau-de-vie*, and also to create a profitable home market for grain.

Perhaps the actual achievements of Talon have sometimes been exaggerated, but his immigration policy and his successful introduction of livestock laid the two essential foundations of Canadian agriculture.

FUR

Fifteen years of peace followed the establishments of Intendant Talon. During this time the fur trade became more desperate

[9] Talon, 6 Apr. 1667, and Talon's Memorandum, 27 Oct. 1667, C-11, vol. 2; Colbert, 5 June 1666, *ibid.*; *Édits et Ords.*, 1:18–19, 70–72.

[10] Talon, 4 Oct. 1665, 5 Jan. 1666, C-11, vol. 2.

[11] Colbert, 5 Jan. 1666, Instructions to Talon, 6 Apr. 1667. For reports on the importation of stock, see Talon's letters in the *Annual Report* of the Archivist of the Province of Quebec.

[12] Talon's Memorandum on Canada, 27 Oct. 1667.

[13] Talon, 13 Nov. 1666.

[14] *Édits et Ords.*, 2:36 *et seq.*; 1:404; J. N. Fauteux, *Essai sur l'Industrie au Canada sous le Régime Français*, 349 (Québec, 1927).

[15] Fauteux, 406–409.

in its competition, and under Count de Frontenac (Governor-General, 1672–1682, 1689–1698), the highest authorities of the colony encouraged bush ranging of all sorts for they saw the need of extending French influence and control into the regions bordering upon the Great Lakes. Notable explorations were made in the inner continent because fur trade and not agriculture had first place in the affections of the autocratic Governor-General. The intendants, Jacques Duchesneau (1675–1682) and de Meulles (1682–1686), contended with the Governor, not only for their proper place in the administration but for the interests of a settled community as against speculative adventure in the west. Meanwhile the official policy was that laid down for Talon: the King stated that agriculture was the only basis for settlement; and his Minister of Colonies, Seignelay, Colbert's son, said that it should be the first interest of Canadian intendants.[16]

With the coming of Duchesneau, a new policy of land grants was begun.[17] Concessions made jointly by the Governor and the Intendant were to be limited in extent to areas commensurate with the capital and energies of those who received them.[18] Consolidation was desired and concentration of settlers led to the erection of a judicial establishment at Montreal analogous to the one already established at Quebec.[19] However, the realities weighed against the farming community, and under aggravated difficulties Talon's policy was pursued by his successors.[20] The cattle throve and were exempted from seizure for debt,[21] but the production of arable land was disappointing.

Frontenac's opposition to cancellation of land grants for lack of development was ominous. His interest was in rewarding his friends, and not in establishing farms.[22] The young men were drawn into the upper country as never before, and Talon's farms and new concessions were left untilled.[23] The Intendant tried

[16] King to de Meulles, 10 May 1685, and Seignelay, 10 Apr. 1685, B, vol. 11.
[17] *Édits et Ords.*, 1:85–90, 81–85, 233–235; Instructions to de Meulles, 1685.
[18] Instructions to de Meulles, 1685, B, vol. 11.
[19] *Édits et Ords.*, 2:85.
[20] De Meulles, 12 Nov. 1782, C-11, vol. 6.
[21] *Édits et Ords.*, 1:250–251.
[22] King to Frontenac, 24 Apr. 1680; Frontenac, 14 Nov. 1680, C-11, vol. 5.
[23] Duchesneau, 11 Oct. 1679, C-11, vol. 5.

to check this serious exodus into the upper "bush," and on his initiative the permit system for trading in the hinterland was introduced in 1681. Even those not bartering for furs were more than likely engaged in selling them across the southern frontier to the English and Dutch.[24]

This smuggling across the border militated against the officially desired trade of the colony. Official sanction was given to fairs at Quebec and Montreal,[25] and official protection was extended to commerce. This freedom of internal trade in staple products became an essential feature of colonial policy.[26] Plans were formed for trade with the West Indies, and Duchesneau communicated with Pastoulet of Santo Domingo, where a market was sought for flour, peas, butter, bacon, cod, salmon, eels, planks, and small timber. The negotiations came to nothing as Pastoulet discouraged the proposal and finally curtly dismissed it by declaring that there was little market in the West Indies for many of these goods, that some of them were poor in quality, and that there was no Canadian market for West Indian produce in return.[27] Duchesneau's successor was instructed—without result—to revive the interest of the West Indian administrators.[28]

Under these circumstances Duchesneau reverted to a modest policy: he did not rely on the products of land cultivation, stock raising, and their dependent industries for the real wealth of the colony, although he believed that agriculture must ultimately become the main support of Canada.[29] Thus, the great opportunity of the peaceful period of Frontenac's first administration was lost. Wars followed intermittently for a generation, and not until the long peace of the eighteenth century was Talon's policy revived.

[24] Extract of information to Intendant Duchesneau concerning trade with Orange and Manatte, September 1682, in C-11, vol. 6.

[25] Colbert, 15 Apr. 1676; the King to Duchesneau, 2 June 1680.

[26] Duchesneau, 10 Nov. 1679; *Édits et Ords.*, 100–101.

[27] Duchesneau, 10 Nov. 1679; Duchesneau, 13 Nov. 1681; Memorandum on trade with the West Indies, 1681, in C-11, vol. 5.

[28] Seignelay to de Meulles, 10 Apr. 1684.

[29] Duchesneau's Memorandum on trade and its difficulties, 13 Nov. 1681, C-11, vol. 5.

WAR

Meanwhile, during the intervals of peace, hopes of prosperity on the concessions returned and active colonization was resumed; and under certain stresses of the wars new experiments were tried.

The policy in regard to land grants was conflicting. The Intendant's interest, increasingly associated with agriculture as opposed to fur adventure, was reflected in official instructions to restrict land grants in the west, to discourage posts such as La Salle's, to limit land grants to appropriate size, to consolidate settlements between existing concessions, and to establish villages on existing seigniories.[30] Military settlers moved to the land during the interval of peace from 1697 to 1702, and to them were added English-speaking refugees and prisoners, some of whom preferred to remain as *habitants*, as well as artisans or *coureurs-de-bois*.[31] Old soldiers became numerous on the Montreal seigniories,[32] and neighboring seigniories were reluctantly opened above Montreal for Vaudreuil and his brother-in-law, Soulanges, where counties still bear their names.[33] Thus, the policy of consolidation was gradually broken down and changed to one of expansion. Some of the outposts were completely isolated, and, although created by and for the fur trade, they became islands of petty agriculture. Kaskaskia and Cahokia in the Illinois country, New Orleans on the lower Mississippi, and new posts in Acadia were established in this manner. Intendant Champigny (1686–1702) tried to prevent settlers going to these new districts from the east, and both the intendants Raudot (1705–1712) opposed the opening of Temiscaming, which, however, did not become an agricultural center.[34]

[30] King's Memorandum, 30 May 1687, B, vol. 13; King's Memorandum, 8 May 1688, B, vol. 15; Champigny, Instructive Memorandum on Canada, 10 May 1691, C-11, vol. 10; King's Memorandum, 1700, B, vol. 16–1.

[31] Phelypeaux (Minister of Marine and Colonies) to Champigny (Intendant, 1686–1702), 27 May 1699, B, vol. 20–2.

[32] Callières (Governor-General) and Vaudreuil (Commander of the troops), 18 Oct. 1700.

[33] King's Memorandum, 1702.

[34] Champigny, 10 May 1691; King's Memorandum, 1700; Raudot, 23 Oct. 1708, 1 Nov. 1709.

A small but permanent market for Canadian wheat and flour was now available at home, but the supply was uncertain. Canada did not yet regularly produce enough food for the Government's needs, and consequently, there was a threat of famine during the English seige of Quebec in 1691. Rations had to be procured from France throughout the whole period of the war. Prices for farm produce rose, and after 1694, except in 1701, Canadian crops were generally good. However, a regular policy had to wait until later.[35]

Shortages caused by poor crops as well as military pressure were relieved not only from France but from the enemy, New England. Opportunities for sea-borne trade with Boston arose, and Vaudreuil and kinsmen of the Minister of Marine and Colonies were accused of exploiting them for their personal interests.[36] But help for Canada from this source was suspected at Versailles.

During the depressed war period the first proposals to establish Negro slavery in Canada on a systematic basis were made. The Attorney-General, d'Auteuil, mentioned it first in 1689, but a Canadian slave trade was not then feasible.[37] Canadians were given permission to buy domestic slaves and to bring slaves to the colony for any purpose, and a few were later introduced as servants.[38] Shortly after the war, Vaudreuil, now Governor-General, and Intendant Bégon (1712–1724) proposed slaves for agricultural development in view of the lethargy of the Canadians. Bégon wrote, "We could almost ensure the increase of this colony and of its trade by having negroes come out here. The whole of New England has been established in so short a time and as well as she is at present only by such assistance. Most of the English and Flemings of Manhattan next to Montreal do not work at all at tilling their land. It is their negroes who do all the labour, and this establishment alone provides the flour necessary for supporting the southern English islands."[39] The letter is surpris-

[35] Champigny's Instructive Memorandum on Canada, 1691; King's Memorandum, 1694, B, vol. 17-1.

[36] Callières and Champigny, 5 Oct. 1701; King's Memorandum, 1702; Callières and Beauharnois, 3 Nov. 1702.

[37] King's Memorandum, 1701, B, vol. 22-4.

[38] Callières and Vaudreuil, 18 Oct. 1700; King's Memorandum, 1701.

[39] C-11, vol. 37, p. 77–78.

ingly inaccurate, but the home government was interested. The proposal was repeated two years later and the Canadian trading company of the moment was instructed to investigate and proceed. Fortunately it was bankrupt and the scheme was not put into execution. A later repetition of the plan was met by doubt that Negroes would be efficient in the Canadian climate. New France never had industrial or agricultural slavery.[40]

In the east the pressure of Queen Anne's War (1702–1713) did not prevent a unique revival of hemp growing under Intendant Beauharnois (1702–1705), though its production usually fell far behind the more popular flax.[41] The intendants Raudot, who were in charge of civil administration during the most depressed period of the war, also reported an increase in agricultural produce and an improvement in the livestock due to more intelligent care.[42] The manufacture of woolen homespun expanded, and Madame de Repentigny maintained an experimental establishment under government subsidy where textiles of various sorts were made from the inner bark of trees, nettles, and wild cotton. Her assistants were *habitante* girls and English women prisoners.[43]

The recovery of agriculture at the close of the war was attributed to the decline of the fur trade. All the intendants of this period supported the policy of trading permits in the "bush" as instituted under Duchesneau, and these were no longer opposed by the Bishop, now Monseigneur de St. Vallier.[44] This system was a means of controlling the fur trade, and Frontenac's breach of this control had retarded agriculture.[45] Only when the fur trade ceased to be the basis of colonial economy, with its indirect influence on currency, could a foreign trade in agricultural produce with its accompanying social development arise.

[40] Bégon to the Council, 25 Oct. 1721, C-11, vol. 41; King's Memorandum, 26 June 1717.

[41] King's Memorandum to Champigny, 5 May 1700, B, vol. 22-2; Pontchartrain (Phelypeaux' son, Minister after 1699) to Raudot, 7 July 1711, B, vol. 33; Council to Bégon, 14 June 1721, B, vol. 44-2.

[42] Raudots, 12 Nov. 1706; 1 Nov. 1709.

[43] Raudots, 9 June 1706; King's Memorandum, 1706.

[44] Vaudreuil, 8 Nov. 1711; St. Vallier, 18 Oct. 1710.

[45] See the Memorandum on the Canadian Farm, 1689.

Illicit trade with the English was not stopped by the wars. Possibly this situation was aggravated by the development of a practical monopoly by a few French merchants of the ordinary retail trade, theoretically to be kept "free."[46] The new Canadian company, which took over the fur trade from 1700 to 1707, was too poor to establish trade with the West Indies and at first even to maintain contact with Hudson Bay.[47] A beginning, however, was made in what was to be an important trade for Canadian farmers: the purchase of foodstuffs in Canada for the King's colonial service. At once the Canadians were accused of profiteering.[48]

REORGANIZATION

The old French colonial empire never recovered from the War of the Spanish Succession (1702–1713); in Canada the end of its American counterpart, Queen Anne's War, was greeted with sober and sombre relief. During the long peace from 1713 to 1744 which followed, Canadian agriculture and the French-Canadian nation acquired permanent character. Under Intendant Bégon, the dream of Champlain and the policy of Talon, thwarted first by the greed of fur traders and then by war, was in part realized. These thirty years of peace, like others of the old régime, were in many ways disappointing, but they were not, as Frontenac's first peaceful decade had been, gross failure.

The struggle between agricultural settlement and fur-trading interests in the west continued, but the advantage was not so certainly in favor of fur. The council of marine set up by the Regency thought that the fur trade was an actual hindrance to Canada and instructed its agents in the colony to concentrate on "wheat, flour, beef hides, salt meat, sheepwool, hemp, flax, tar, resin, masts, and timber."[49] Although not a new policy, attempts were now made to enforce it. The population of the colony was about twenty-one thousand, and the tilled land averaged only 14

[46] Champigny, 10 May 1691.

[47] Vaudreuil (Governor-General, 1705–1725) and Beauharnois, annual letter, 1704; unsigned letter in C-11, vol. 22, p. 39–43.

[48] King's Memorandum, 1695; Instructions to Intendant Raudot, 1705.

[49] Instructions for Governor and Intendant, 1716, C-11, vol. 36.

arpents a family (families averaged six in number). Each family had an average of six cattle and four sheep. The number of horses was rapidly increasing, though in 1716 there was only one for each household.[50] A generation of war, interrupted usually only for bush ranging, had resulted in too many of the Canadians being lazy farmers.[51]

The seigniorial system was betraying its weaknesses. Reorganization after 1711, associated with the Edicts of Marly, and the policy of granting lands only on condition of settlement—a policy never hitherto enforced at law—encouraged agricultural revival. The war boom was carried over into an invigorated system. Seigniories and concessions were actually limited in extent,[52] and the new laws were enforced.[53] The tendency of Bégon's decisions in seigniorial judgments was to fix corvées in money form where possible which in times of inflation meant relief to actual farmers. Bégon contributed to the efficiency of the seigniorial regulations,[54] and took steps toward a new road policy.

Trade did not develop as steadily as the stimulus to agriculture would suggest. A rapid and only partially controlled inflation confused prices after 1709. Bégon wished to have sufficient funds to control prices and so regulate trade in accordance with policy, but the necessary amount was not available in the depleted French treasury of 1712.[55] Like his predecessors, Bégon was faced with shortage in foodstuffs, and he made the occasion an opportunity for personal trade under governmental authority. For this he was severely rebuked. It had been all right for Talon to trade as an example to the colonists, but it was not proper for a Bégon, in spite of the long service of his family.[56]

[50] Census, 1716; Vaudreuil and Bégon, 21 Feb. 1717.

[51] King's Memorandum, 5 June 1712.

[52] King's Memorandum, 1715; *Édits et Ords.*, 1:323–326.

[53] *Édits et Ords.*, 2, *passim*.

[54] Lareau, *Histoire du Droit Canadien*, considers Bégon one of the most capable intendants, speaking from the lawyer's point of view.

[55] Bégon, 12 Nov. 1712.

[56] Yvonne Bezard, *Fonctionnaires Maritimes et Coloniaux sous Louis XIV: Les Bégon* (Paris, 1932).

Bégon was evidently grasping, and after his reprimand he was chary about price fixing and sumptuary regulation.[57] Intendants henceforth were forbidden to trade, as their proper duties should take all their time and because they could not refrain from interfering with the freedom of retail trade so much desired by the Minister.[58] This regulation later drove Bigot's trade underground.

The desperate case in which the French Government found its Canadian colony after 1713, now almost entirely surrounded by the English, led to the development of Louisbourg on Île Royale. As the key to Canada, it was to be not only a fortress but a base for imperial trade, replacing and surpassing the lost Placentia of Newfoundland.[59] Bégon organized— not too carefully at first— Canadian trade with reference to this new, colonial clearing-house. The trade became regular after 1714, both to France and the West Indies. By 1716, 5 percent of the Canadian wheat crop was exported by the Louisbourg route.[60] Canadian goods entering France were put on the same footing with those from the West Indian colonies.[61] Trade with the English, the Spanish, or the Portuguese—in these strange days occasionally allies—was forbidden,[62] but English traders were frequently found at Montreal. This, however, did not affect agriculture; the illicit denizens were interested in furs, blankets, and kettles.

PROSPERITY

The administration of Intendant Gilles Hocquart from 1729 to 1748 was the longest in the French régime and the most successful agriculturally in the history of New France. Throughout his intendancy, agriculture continued to be the chief interest of the colony.[63] The consolidation that had marked the administration

[57] On the shortage and on Bégon's graft, see the correspondence in C-11, vol. 34 and 35, and in B, vol. 37-3.

[58] Council of Marine, 10 June 1716, B, vol. 38-2; King's Memorandum, 14 May 1726, B, vol. 49-2.

[59] King's Memorandum, 1713; Pontchartrain, 22 May 1714, B, vol. 36-3.

[60] Pontchartrain, 22 Mar. 1714; Census, 1716; Vaudreuil and Bégon, 4 Oct. 1718.

[61] Instructions, 11 Dec. 1717; C-11, vol. 42; Bégon, 2 Nov. 1724, C-11, vol. 46.

[62] Instructions to Governor and Intendant, 1716.

[63] King's Memoranda, 15 May 1736, and 13 May 1740.

of Bégon was continued. Both seigniorial and *habitant* concessions were cancelled if they remained unsettled.[64] After 1741 new grants were to be made only after settlement.[65] The legal position of existing landholders was insured by the completion, after years of delay, of the *papier terrier* by Attorney-General Verrier in 1740,[66] and a serious attempt on the part of the Church to increase the rate of tithes was prevented in the interest of agriculture.[67]

New settlements developed slowly. Detroit alone became self-supporting in food,[68] while the Lower St. Lawrence and the more southern seigniories remained unoccupied.[69] Salt smugglers transported from France provided a new and, on the whole, successful contribution to the population.[70] For the first time fear of English encroachments was expressed, not as merchants but as farmers pressing down from Lake Champlain.[71] Highways were cleared along the main routes of travel;[72] and the leaders of the Canadian *habitant* communities, the militia captains, acquired civil authority and new social significance.[73]

Hocquart energetically supervised the introduction of special agricultural crops. At first the *habitants* were little interested,[74] but he continued to press for hemp growing and occasionally during his rule there was a sufficient store of it. Ropemakers came from France at his request, and the craft throve for years at

[64] *Édits et Ords.*, 2:518–519, 556–557.

[65] King's Memorandum, 12 May 1741.

[66] Hocquart, 4 Oct. 1740, C-11, vol. 73.

[67] Maurepas to the Bishop of Quebec, 11 Apr. 1731, B, vol. 55-2; Beauharnois (Governor, 1726–1749) and Hocquart, 2 Oct. 1731, C-11, vol. 54.

[68] Maurepas, 1 Apr. 1730, B, vol. 54-3.

[69] King's Memorandum, 11 Apr. 1730.

[70] Beauharnois and Hocquart, 15 Oct. 1734, C-11, vol. 55; Maurepas, 14 May 1738.

[71] King's Memorandum, 13 May 1740.

[72] *Édits et Ords.*, 2:342, 350–357, 366 *et al. loc.;* Lanouiller de Boisclerc (Grand Voyer), 10 Oct. 1734, C-11, vol. 62; 29 Oct. 1739, C-11, vol. 72; *Inventaire des Procès-Verbaux des Grands Voyers Conservés aux Archives de la Province de Québec, passim.*

[73] *Édits et Ords.*, 2, *passim;* Hocquart, 12 Oct. 1738.

[74] King's Memorandum of Instructions for Hocquart, 22 May 1729, B, vol. 53-2.

Quebec.[75] Technical advice was given for flax growing which showed a decided improvement after 1734.[76] Grain was kept cleaner than heretofore, and Hocquart imported and licensed sifters, and designated trade-marks for the different millers.[77] The production of tobacco for domestic use was improved.[78] In the preparation of resinous products from wood, the trees of the *habitants* were sometimes used, and Hocquart continued the work of Bégon in developing this industry by expert advice and organized markets.[79] Potash continually received similar care for local use.

Instead of pursuing the policy advocated by Madame de Vaudreuil who wished to limit the number of horses, Hocquart adopted Intendant Dupuy's idea of exporting them.[80] It was hoped that they might be bred in Île Royale from Canadian pony stock and transported to the French West Indies; one Canadian merchant made an unsuccessful attempt. The plan was dropped after 1740, largely on account of the difficulty of transportation.[81] Hocquart had greater faith in a similar trade in cattle. Contacts were made with the authorities in the French West Indies in regard to their needs, but again the lack of proper boats and the difficulty in getting suitable return cargo frustrated the Intendant's hopes.[82]

As a prime market, Bégon's trade with Île Royale was extended more fully to the West Indies. During the last ten years of Hocquart's administration West Indian produce, except rum, was admitted into Canada free.[83] Canadian exports were still almost

[75] Hocquart, 25 Oct. 1729; C-11, vol. 51; 14 Jan. 1730, C-11, vol. 53; 15 Oct. 1735, C-11, vol. 64; 12 Oct. 1737, C-11, vol. 68; 26 Sept. 1740, C-11, vol. 73; Maurepas, 17 Apr. 1731.

[76] Maurepas, 12 Apr. 1735, B, vol. 63-1.

[77] Maurepas, 8 Apr. 1732, B, vol. 57; Regulations for flour, 18 May 1732, B, vol. 55-2; *Édits et Ords.*, 2:352–353.

[78] Hocquart, 12 Oct. 1737, C-11, vol. 68.

[79] Hocquart, 25 Oct. 1729, C-11, vol. 51; 17 Oct. 1730, C-11, vol. 53; Maurepas, 17 Apr. 1731, B, vol. 55-2; Hocquart, 15 Oct. 1735, C-11, vol. 64; 28 Sept. 1740, C-11, vol. 73.

[80] Maurepas, 17 Apr. 1731, B, vol. 55-2; Reply to King's Memorandum, 1737.

[81] King's Memorandum, 1 May 1739, B, vol. 68.

[82] Beauharnois and Hocquart, 4 Oct. 1731; King's Memorandum, 27 Apr. 1734.

[83] King's Memorandum, 12 Apr. 1730; Hocquart, 1 Oct. 1738, C-11, vol. 69; Maurepas, 14 Oct. 1738, B, vol. 66.

exclusively agricultural.[84] Hocquart took personal interest in the purchase and expedition of flour, especially for the rations of the marines at Louisbourg.[85] Later, vegetables were also sent, although the local authorities thought that Île St. Jean (Prince Edward Island) would be a more convenient source.[86] After a slow beginning the trade exceeded its scale under Bégon, with interruption only during the shortages in 1737 and 1749.[87] Canadian farmers and millers complained, however, that the margin of profit was too small, especially because of the low price of biscuits.[88] Foreign flour was normally prohibited in Île Royale, and even French flour was kept out, although the Canadians refused to believe that these prohibitions were enforced. As in Canada, English smuggling was all too common there, especially during the thirties.[89] The regularity of this market in Île Royale, and in Martinique where wheat was annually exported after 1735, kept up Canadian prices, but the Minister complained that Hocquart was too generous with prices in his Canadian purchases, while Île Royale objected to their food costs and to the Canadian monopoly which they considered responsible.[90]

The Canadian balance of trade with Martinique remained unfavorable, but that with France became favorable after 1739, marking the establishment of a regular triangular system of colonial trade.[91] In this, Canadian agricultural produce played an important rôle. However, Hocquart's suggestion of a government-owned store at Louisbourg was not accepted.[92]

Hocquart forwarded the Government's policy in trying to keep

[84] Instructions for Hocquart, 22 May 1729.

[85] King's Memorandum, 15 Apr. 1734.

[86] Maurepas, 10 Apr. 1736, B, vol. 64-3.

[87] Beauharnois and Hocquart, 1 Oct. 1733, C-11, vol. 59; King's Memorandum, 15 May 1736; King's Memorandum, 12 May 1740.

[88] Beauharnois and Hocquart, 1 Oct. 1733; 12 Oct. 1736, C-11, vol. 65.

[89] King's Memorandum, 13 May 1740; King's Memorandum, 22 Apr. 1732; on smuggling, Maurepas, 22 Apr. 1737, B, vol. 65-3; 7 Apr. 1739, B, vol. 68-1.

[90] Reply to the King's Memorandum, 1737; Maurepas, 2 Apr. 1740, B, vol. 70-1; King's Memorandum, 1740.

[91] Maurepas, 10 Apr. 1736, B, vol. 64-3; Hocquart, 25 Oct. 1740; Maurepas, 16 Apr. 1741, B, vol. 72.

[92] King's Memorandum, 1740.

the prices of merchandise as low as possible for the *habitants*, especially on the new frontiers,[93] and the protection maintained for the peddlers from France, whom the Canadian merchants wanted to get rid of, served the same end as they were the real contacts between the *habitants* and the outside world.[94] English merchants still lingered in Montreal in spite of tightening regulations and laws against trade with foreigners.[95] The direct ramifications of foreign smuggling and the fur trade were the reasons constantly assigned by the Minister, Maurepas, for the relatively slow development of colonial trade and exports to France.[96] However, his judgments on trade were not learned; he never seemed to understand the natural results of his own inflationary policy associated with the stabilized card money begun in 1729, nor did he see the connection of the Canadian trade with the West Indies and the other two sides of the commercial triangle.[97]

New France's most serious peace-time depression occurred during the winter of 1737 and was followed by a virtual crop failure. Starvation threatened the towns and many *habitants* were short of food. Hocquart was in France on leave until the autumn, but his subdelegate at Montreal, Michel, and the Superior Council at Quebec took charge. Rigid control of trade was instituted, including a government monopoly of wheat. Flour was imported from France, and seed grain was issued to the *habitants*. Precedent for the strict control had occurred during minor shortages in 1729 and 1733. On all these occasions the direct interference with freedom of retail trade was tolerated by the Minister only on persuasion of urgent necessity.[98]

[93] King's Memorandum, 1 May 1738, B, vol. 69.

[94] King's Memorandum, 12 Apr. 1730, B, vol. 54-2.

[95] Beauharnois, 6 Oct. 1739, C-11, vol. 71; *Édits et Ords.*, 2:338–339.

[96] King's Memoranda, 12 Apr. 1730; 5 Apr. 1736, B, vol. 64.

[97] King's Memorandum, 22 May 1729, B, vol. 53-2; Beauharnois and Hocquart, 25 Oct. 1729; Maurepas, 4 Apr. 1741, B, vol. 72; footnote in Adam Shortt, ed., *Documents Relating to Canadian Currency, Exchange and Finance during the French Period*, 695 (Ottawa, 1925).

[98] Beauharnois and Hocquart, 14 Oct. 1733, C-11, vol. 59; King's Memorandum, 27 Apr. 1734; Maurepas, 14 Apr. 1738; 1 May 1739, B, vol. 68.

COLLAPSE

The collapse associated with the administration of Intendant François Bigot from 1748 to 1760 did not prevent the continuation of Hocquart's successful policies for a few years. Flour and wheat remained the chief articles of colonial produce stressed by the Ministry in France.[99] The establishment of *habitants* on holdings too small to support them was discontinued,[100] and negligent *habitants* lost their land.[101] The population was increasing rapidly, but almost exclusively by natural increase. Bigot brought over a few artisans, and tried to prevent young *habitants* from flocking to the towns to become unemployed.[102]

This stable situation was shaken by frequent poor crops during the early fifties and then by the ruin of the French and Indian War (1754–1763).[103] The hemp industry collapsed with Hocquart's withdrawal, and Bigot's attempt to revive it was unsuccessful. Flax remained a regular crop and the wheat acreage was maintained.[104] When the British fleet sailed up the St. Lawrence River from captured Louisbourg in 1758 the severing of communication, combined with poor crops and the mobilization of ten thousand farmers, created a danger of famine. It was then that further use was made of potatoes, with which Bigot had been experimenting. They had been unknown to Canadians before this time and were still despised as food by Frenchmen.[105] The livestock of Canada, especially the sheep, appeared poor to a contemporary French observer.[106] Under Bigot the exotic ginseng trade received great impetus, though he was little inter-

[99] Rouillé (Minister, 1749–1754) to Duquesne (Governor, 1752–1755) and Bigot, 8 June 1753, B, vol. 97.

[100] *Édits et Ords.*, 2:400, 588, *et al.*

[101] *Ibid.*, 591–596; Rouillé, 8 June 1753.

[102] Bigot, 27 Oct. 1750, C-11, vol. 96; *Édits et Ords.*, 2:399–400.

[103] Vaudreuil (son of the former governor, Governor, 1755–1760) 19 Apr. 1757, C-11, vol. 102.

[104] King's Memorandum of Instructions to Bigot, 23 Feb. 1748; Bigot, 23 Sept. 1749, C-11, vol. 93.

[105] Vaudreuil and Bigot, 8 Aug. 1758, C-11, vol. 103-1.

[106] Beaumont, "Considerations on the Present State of Canada," October 1758, C-11, vol. 103-1.

ested personally. Two Quebec ladies developed a flourishing trade on the Indian reserve at Lake St. Louis.[107]

As Bigot had been promoted to Canada from Louisbourg, and also had personal touch with the textile and brandy trades from Bordeaux, he was thoroughly *au fait* with the needs of Canadian commerce. The export trade had actually increased during King George's War (1740–1748), and now amounted to 50,000 quintals of flour, half as much of peas, half as much again of biscuit, besides irregular amounts of vegetables, beef, pork, and salmon.[108] Bigot maintained this trade as long as the produce could be squeezed out of the country.[109] The supplies bought for the King's service in Île Royale and Canada increased rapidly, and it was Bigot who added Canadian salt fish as a regular export to the West Indies.[110]

The military reënforcements introduced under Dieskau and Montcalm in 1755 at first made the importation of flour from France again necessary, but this was intended to be only temporary.[111] The problems of supplies and external trade were complicated by the Government's mishandling and misunderstanding of inflation.[112] Although Bigot was not honest, he was efficient. Repeated suggestions for establishing a royal store were refused,[113] but the Government did not prevent his assisting in the creation of a private one under his friend, Joseph Cadet. The crop shortage of 1751–2 had given Bigot his first opportunity to interfere directly in business, and the more serious shortage of 1758 repeated the opportunity when the Bigot-Cadet organization was in full swing.[114] Bigot failed to gain permission to organize a

[107] See the correspondence concerning Mlles. Desauniers in C-11, vol. 97 and B, vol. 93.

[108] Memorandum on Canada, 1748, C-11, vol. 96; King's Memorandum, 30 Apr. 1749, B, vol. 89.

[109] E.g. in times of shortage, Bigot, 20 Aug. 1750, C-11, vol. 96.

[110] Instructions to Bigot, 23 Feb. 1748, B, vol. 87; Beaumont, "Considerations"; Rouillé, 1 June 1750, B, vol. 91.

[111] Machault (Minister, 1754–1757), 14 Mar. 1756, 101.

[112] Shortt, 2:887.

[113] Martin's Project, 5 Nov. 1752, C-11, vol. 98; Beaumont, "Considerations."

[114] For 1752, see appropriate letters in C-11, vol. 98 and B, vol. 99; Rouillé, to la Jonquière (Governor 1749–1752), 25 Feb. 1752, B, vol. 95; Bigot to Gradis, 4 May 1752, in Bigot's private letters, Canadian Archives; Beaumont, "Considerations"; Mauras (Minister 1757–1758), 10 Feb. 1758, B, vol. 107.

regular agricultural intelligence service through the curés and militia captains, on which an exact organization of export trade in farm produce might have been based.[115]

Bigot established personal control of the civil service, through the financial side centering in the controller at Quebec, and through the stores under the storekeepers throughout the entire colony. All of these were under his direct authority as Intendant.[116] By 1752 this personal system was well established, the civil servants being devoted to Bigot's personal interests which he managed to make theirs also.[117] The system of purchasing rations became grossly corrupt and profitable to the commissaries and the officials and no longer profitable for the *habitants*.[118] Issues of other stores beside rations were similarly controlled, but it was the ration purchases which drained the Canadian farms. The *habitants* came to care little which side won the war. Behind the scenes the actual director of this graft was Cadet, who began as the inheritor of a prosperous butcher business in Quebec.[119] He finally received an inflated, corrupt, long-term contract for supplying everything needed for a much enlarged Canadian garrison,[120] and it was through his store and contract that Bigot exploited the food shortage during the last two years of French rule.[121] This new form of pillage came to be a tyranny for the Canadian *habitant*. The old régime closed in misery for the agriculturist.

[115] Rouillé, 8 June 1753, B, vol. 97.

[116] Mémoire pour Bigot, in Canadian Archives.

[117] Rouillé, 19 May 1752, B, vol. 95.

[118] Rouillé, 19 May 1752; 18 June 1753, B, vol. 97.

[119] For references to the beginnings of Cadet's career, see *Inventaire des Jugements et Délibérations du Conseil Supérieur de la Nouvelle-France de 1717 à 1760*, vol. 1 (Beauceville, 1932); and as evidence of his wide western trade, see the references in "Repertoire des Engagements pour l'Ouest, Conservés dans les Archives de Montreal," in the *Annual Report* of the Archivist of the Province of Quebec, 1931–1932; Vaudreuil, 13 Oct. 1756, B, vol. 101; May 1757, B, vol. 105.

[120] Mémoire pour Bigot, 63–169.

[121] Bernier, military commissioner, 15 Apr. 1759, C-11, vol. 104-2; L. E. Dussieux, *Le Canada sous la Domination Française; d'après les archives de la marine et de la Guerre*, ch. 13 (Ed. 2., Paris, 1862).

CONCLUSION

The rival fur trade was beaten; the export of farm produce rose to profitable heights; a permanent rural society was deeply founded; but Bigot's corruption and defeat made the years of the Conquest bitter and ruinous. However, the permanent work of Bégon and Hocquart matured in later decades.

The long peace of the eighteenth century provided an opportunity, not altogether neglected, for making Canada definitely in fact, and not merely in imperial theory, an agricultural colony. The descendants of the men who worked the fields under Bégon and Hocquart are the French-Canadians of today. Even now although occasionally *voyageurs*, trappers, fishermen, and shantymen, the humbler ranks of the race are essentially farming pioneers. When a new mine is prospected, or when a new forest concession is granted, the chances are that French-Canadian families move on to their next planting ground. They sing the songs of their ancient waterways, sailormen, and *coureurs-de-bois*, but their passion is not for the sea or the west but for the soil. The richest agricultural seed of all, sturdy from the hopes of Champlain and Talon and the schemes of Bégon and Hocquart, is the seed of the nation, a nation rich in songs but whose national anthem is of the *terre de nos aieux*. In that unexpected way the agricultural policy of the dead French empire has permanently enriched our continent.

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NEWS NOTES AND COMMENTS

DECEMBER MEETING OF THE AGRICULTURAL HISTORY SOCIETY

The Agricultural History Society met currently with the American Historical Association and other historical societies at Washington, D. C., on December 27, 28, and 29, 1934. About four hundred attended the luncheon of the Agricultural History Society on December 27 when the Honorable Henry A. Wallace, Secretary of Agriculture, spoke on the need for unity of purpose for national progress. Professor Edwin F. Gay, the Society's president, presided. The joint session of the Agricultural History Society with the American Historical Association on Saturday morning, December 29, was devoted to Land Policies and Agriculture. The following are the titles of the papers which were presented: State and Federal Land Policies during the Confederation, by Dr. Henry Tatter of Oak Park, Illinois; The Spanish Land Grant System as an Influence on the Agricultural Development of California, by Dr. R. H. Allen of the Agricultural Adjustment Administration; and Readjustments in Local Government as Part of a Land Utilization Program, by Professor George S. Wehrwein of the University of Wisconsin. Professor W. F. Dunaway of Pennsylvania State College acted as chairman of the session, and about forty were in attendance.

PROFESSOR RAYNER WICKERSHAM KELSEY

Dr. Rayner W. Kelsey, professor of history at Haverford College, died on October 29, 1934 at the age of 55. He was graduated at Earlham College in 1900 and took his doctorate at the University of California in 1909. In that year he joined the faculty at Haverford. A charter member of the Agricultural History Society, he contributed two papers to its publications: "Possibilities of Intensive Research in Agricultural History," in *Agricultural History Society Papers*, 2: 377–383; and "Description and Travel as Source Material for the History of Early Agriculture in Pennsylvania," in *ibid.*, 3: 285–292. Professor Kelsey was recognized as an authority on the history of the Friends in America.

PERSONAL

Dr. Russell H. Anderson, curator of agriculture, textiles, and forestry at the Museum of Science and Industry, Chicago, is continuing the research presented in his dissertation on "Agriculture in Illinois during the Civil War Period, 1850–1870," with a view to the preparation of a history of agriculture in Illinois.

Mr. Everett E. Edwards has accepted an invitation extended by Professor Harry J. Carman of Columbia University to become a member of the Advisory Board of the *Columbia University Studies in the History of American Agriculture*.

Dr. Morris Halperin is now connected with the Forest Experiment Station at the University of California, Berkeley.

In an article on "The Antiquity of *Puccinia Graminis* and *Ustilago Tritici* in California" in *Phytopathology*, 24: 1313 (November 1934), Professor G. W. Hendry (with H. N. Hansen) utilizes his method of adobe brick analysis in the study of the history of plant disease. This is probably the first instance of the use of this method for this purpose.

Dr. Joseph C. Robert joined the faculty of the department of history at Ohio State University in September 1934.

Dr. Joseph Schafer, superintendent of the State Historical Society of Wisconsin and president of the Agricultural History Society during 1931–32, has accepted an invitation to deliver a series of eight lectures on "The Social History of Agriculture in the United States" at University College, University of London, between January 15 and March 18, 1936.

The first of the two volumes of the *Virginia Historical Index*, edited by Dr. E. G. Swem, has been issued.

ARTICLES ON AMERICAN AGRICULTURE

Unclassified: O. F. Ander, "The Immigrant Church and the Patrons of Husbandry," *Agr. Hist.*, 8:155–168 (October 1934). Isaiah Bowman, "Our Expanding and Contracting 'Desert'," *Geogr. Rev.*, 25:43–61 (January 1935). Erwin Grane, "Forecasts of General Price Level in Retrospect, 1919–1931," *Amer. Econ. Rev.*, 24:250–265 (June 1934). R. W. Hill, "John Pitkin Norton's Visit to England, 1844," *Agr. Hist.*, 8:219–222 (October 1934). Herbert Heaton, "The American Farmer," considered as the most important factor in the international situation today, *Polit. Quart.*, 5:530–548 (October 1934), and "Migration and Cheap Land—the End of Two Chapters," *Sociological Rev.*, 26:231–248 (July 1934). A. N. Lytle, "John Taylor and the Political Economy of Agriculture," *Amer. Rev.*, 3:432–447, 630–643 (September, October 1934). H. H. Manchester, "Milling at the Dawn of the 19th Century," *Northwest. Miller*, 180:429 (Nov. 14, 1934). L. B. Schmidt, "The Agricultural Revolution in the Prairies and the Great Plains of the United States," *Agr. Hist.*, 8:169–195 (October 1934). W. J. Peterson, "Population Advance to the Upper Mississippi Valley, 1830–1860," *Ia. Jour. Hist. and Polit.*, 32:312–353 (October 1934). H. J. Wunderlich, "Foreign Grain Trade of the United States, 1835–1860," *ibid.*, 33:27–76 (January 1935). T. R. Smith, "The Wheat Surplus," *Geogr. Rev.*, 25:107–116 (January 1935). "When Dairying Was Young," and "Adventuring through Early Years with Hoard's Dairyman," *Hoard's Dairyman*, Jan. 25, 1935. The following articles in the *Amer. Fruit Grower*, May 1934:—L. H. Bailey, "Fifty Years of Orcharding in America." J. T. Bregger, "The Past 50 Years Through the Pages of the American Fruit Grower," and "Progress in Fruit Machinery." K. I. Fawcett, "Fifty Years of Codling Moth." H. L. Lantz, "Variety Romance in American Pomology." "From Paris Green to Modern Insecticides."

Alabama: John Beecher, "The Share Croppers' Union in Alabama," *Social Forces*, 13:124–132 (October 1934).

Arizona: Mary Kidder Rak, *A Cowman's Wife* (Boston, Houghton Mifflin Co., 1934. 292 p.).

Maine: A. S. Carlson and John Weston, "The Sweet Corn Industry of Maine," *Econ. Geogr.*, 10:382–394 (October 1934).

Massachusetts: "The First Grist Mill in Old Colony," built by Isaac Stedman at Greene Bush near Plymouth in 1640, *Northwest. Miller*, 181:310 (Jan. 30, 1935).

Minnesota: A. H. Moehlman, "The Red River of the North," *Geogr. Rev.*, 25:79–91 (January 1935).

Mississippi: G. M. O'Donnell, "Portrait of A Southern Planter, 1920–1932," *Amer. Rev.*, 3:608–629 (October 1934), concerning the Huntington Plantation in the delta country.

Nebraska: the following articles in the *Nebraska Farmer*, Dec. 8, 1934: D. V. Stephens, "Our 75th Birthday." "Pioneers Who Broke the Sod so Men to Come Might Live." A. E. Sheldon, "An Empire Built from Grass," and "Furnas, Foremost Nebraskan." "The Melting Pot." "Peeks into the Past; An Adventure through Old Volumes of the Nebraska Farmer."

New York: The New York State Agricultural Experiment Station is publishing a work entitled *The Vegetables of New York*, to be issued in three volumes of several parts each. Part 1 of Volume 1, *The Peas of New York*, was printed in 1928; Part 2, *The Beans of New York*, in 1931; and Part 3, *The Sweet Corn of New York*, in 1934.

North Dakota: see above under *Minnesota*.

Pennsylvania: the following articles in the *Pa. Farmer* for Oct. 27, 1934: G. F. Johnson, "Milestones in Pennsylvania Agriculture." S. W. Fletcher, "The Keystone Fruit Industry." H. C. Knandel, "Poultry Makes Progress." A. A. Borland, "Pennsylvania is a Great Dairy State." G. S. Watts, "Vegetable Growing in Pennsylvania."

Rhode Island: W. D. Miller, "The Narrangansett Planters," Amer. Antiquarian Soc., *Proc.*, 43:49–115 (April 1933).

The South: Everett E. Edwards, "A Bibliography of the Writings of Professor Ulrich Bonnell Phillips," introduction by Fred Landon, *Agr. Hist.*, 8:196–218 (October 1934).

Texas: K. E. Ashburn, "Slavery and Cotton Production in Texas," *Southwest. Social Sci. Quart.*, 14:257–271 (December 1933).

Virginia: William Shepard, "Tobacco Inspection at Cartersville, Cumberland County, Virginia, or Commonwealth vs. Dudley Street [1794]," *William and Mary Col. Quart. Hist. Mag.*, 14:181–202, 315–332 (July, October 1934); W. T. Stauffer, "The Old Farms out of Which the City of Newport News Was Erected," *ibid.*, 14:203–215, 333–341 (to be continued).

Washington: Victor Roterus, "Spring and Winter Wheat on the Columbia Plateau," *Econ. Geogr.*, 10:368–373 (October 1934).

ARTICLES AND BOOKS ON BRITISH AGRICULTURE

Comprehensive or unclassified: Margaret Dickins, *A Little History of Cherington and Stourton, Warwickshire* (Banbury, Banbury Guardian, 1934. 69 p.). [E. W. Fenton], "Pasturelands and Stock in Scotland," *Scot. Geogr. Mag.*, 50:335–337 (September 1934). G. E. Fussell, "The Development of Agricultural Machinery in England," *Engineering* (London), 138:134–136, 161–162 (Aug. 10, 17, 1934). F. W. Grube, "Cereal Foods of the Anglo-Saxons," *Philological Quart.*, 13:140–158 (April 1934). H. H. Parker, *The Hop Industry* (London, P. S. King & Son, 1934.

327 p.), especially ch. 1, The Hop Industry in England to A. D. 1800, and ch. 2, The Development of the English Hop Industry in the Nineteenth Century. A. G. Ruston and Denis Witney, *Hooton Pagnell: The Agricultural Evolution of a Yorkshire Village* (New York, Longmans, Green & Co.; London, Edward Arnold & Co., 1934. 459 p.). Al. Šašek, "Pozemková držba podle práva anglického [La propriété foncière d'après le droit anglais]," *Věstnik* (Československé Akademie Zemědělské) 10:632–639 (Praha, 1934). H. L. Savage, "Hunting in the Middle Ages," *Speculum*, 8:30–41 (January 1933). A. G. Street, "New and Old in Wiltshire," *Fortnightly*, 142:85–92 (July 1934).

13th Century: D. G. Denoon and Trelawney Roberts, eds., "The Extent of Edgware, A. D. 1277," London and Middlesex Archaeological Soc., *Trans.* (n.s.) 7:158–174 (London, Bishopsgate Inst., 1932).

14th Century: J. Froissart, "Wat Tyler's Rebellion," *Golden Book*, 20:58–63 (July 1934). G. P. Jones, ed., *The Extent of Chirkland, 1391–1393*, compiled by Robert Eggerley (London, Univ. Press; London, Hodder & Stoughton, 1933. xxxv, 102 p.). R. A. Pelham, "Further Evidence of the Methods of Transporting Produce in Mediaeval Sussex," *Sussex Notes and Queries*, 4:129–131 (Lewes, Sussex Archaeological Soc., 1933).

15th Century: H. L. Gray, "Incomes from Land in England in 1436," *Eng. Hist. Rev.*, 49:607–639 (October 1934).

16th Century: N. G. Brett-James, "Some Extents and Surveys of Hendon," London and Middlesex Archaeological Soc., *Trans.* (n.s.) 6:547–578, 7:1–33 (London, Bishopsgate Inst., 1932–33); "A Survey of the Manor of Hendon in the County of Middlesex . . . 1574," *ibid.*, 7:33–70, maps. R. J. Hammond's thesis on "The Social and Economic Circumstances of Ket's Rebellion," summarized in Inst. Hist. Research, *Bull.*, 12:120–122 (November 1934).

17th Century: M. P. Ashley, *Financial and Commercial Policy under the Cromwellian Protectorate* (London, Oxford Univ. Press, 1934. 190 p.), reviewed by A. V. Judges in the *Econ. Hist. Rev.*, 5:130–132 (October 1934). E. M. Hampson, *The Treatment of Poverty in Cambridgeshire, 1597–1834* (Cambridge, Univ. Press, 1934. 308 p.). J. U. Nef, "The Progress of Technology and the Growth of Large-Scale Industry in Great Britain, 1540–1640," *Econ. Hist. Rev.*, 5:3–24 (October 1934). A. J. Tawney and R. H. Tawney, "An Occupational Census of the Seventeenth Century," *ibid.*, 5:25–64.

18th Century: G. G. Alexander, "The Manorial System and Copyhold Tenure," Thoresby Soc., *Pubs.*, 33:283–305 (Leeds, 1931). E. B. Bailey, "The Interpretation of Scottish Scenery," *Scot. Geogr. Mag.*, 50:308–330 (September 1934). G. E. Fussell, "Francis Forbes: A Real 18th Century 'Book Farmer'," *Notes and Queries* (London), 167:201–206 (Sept. 22, 1934). W. B. Mercer, "Thomas Furber, An 18th Century Cheesemaker," *Reaseheath Rev.* (Reaseheath, Cheshire), 5:5–14 (1933).

19th Century: H. L. Beales, "The 'Great Depression' in Industry and Trade [1873–1886]," *Econ. Hist. Rev.*, 5:65–75 (October 1934). Chester Kirby, "The English Game Law System," *Amer. Hist. Rev.*, 38:240–262 (January 1933). W. B. Mercer, "Ralph Basford, 1818–1835," *Reaseheath Rev.* (Reaseheath, Cheshire), 6:7–18 (1934).